



FIGURE 1

FIGURE 41A

hUbiquitin	
Primary probe	5' -CGC CGA GAT CAC CTT TAC ATT TTC TAT CGT NH2-3'
INVADER oligonucleotide	5' -CCT TCC TTA TCC TGG ATC TTG GCA -3'
ARRESTOR oligonucleotide	5'-ACG ATA GAA AAT GTA AAG GTG ATC-3'
FRET Probe	5'-RED-CTC (Z28) TTC TCA GTG CG-3'
Secondary target	5'-CGC AGT GAG AAT GAG GTG ATC TCG GCG GT-3'
(SEQ ID NO:169)	
(SEQ ID NO:170)	
(SEQ ID NO:171)	
(SEQ ID NO:172)	
(SEQ ID NO:173)	
m/r Ubiquitin, mouse (288C, 516C, 744C, 972C), rat (247C, 475C, 703C, 931C)	
Primary probe	5'-CCG CCG AGA TCA CGG ATG TTG TAA TCA GAG A-NH2-3'
INVADER oligonucleotide 1	5'-GTG CAG GGT TGA CTC CTT CTC-3'
INVADER oligonucleotide 2	5'-GTG CAG GGT TGA CTC TTT CTC-3'
INVADER oligonucleotide 3	5'-GTG CAG GGT CGA CTC TTT CTC-3'
ARRESTOR oligonucleotide	5'-TCT CTG ATT ACA ACA TCC GTG ATC T-3'
FRET Probe	5'-RED-CTC (Z28) TTC TCA GTG CG-3'
Secondary target	5'-CGC AGT GAG AAT GAG GTG ATC TCG GCG GT-3'
(SEQ ID NO:174)	
(SEQ ID NO:175)	
(SEQ ID NO:176)	
(SEQ ID NO:177)	
(SEQ ID NO:178)	
(SEQ ID NO:172)	
(SEQ ID NO:173)	
r/m GAPDH, rat (150C), mouse(166C)	
Primary probe	5'-CGC CGA GAT CAC GTA GTT GAG GTC AAT GA-NH2-3'
INVADER oligonucleotide	5'-GAA TCA TAC TGG AAC ATG TAG ACC ATC-3'
ARRESTOR oligonucleotide	5'-TCA TTG ACC TCA ACT ACG TGA TCT-3'
FRET Probe	5'-RED-CTC (Z28) TTC TCA GTG CG-3'
Secondary target	5'-CGC AGT GAG AAT GAG GTG ATC TCG GCG GT-3'
(SEQ ID NO:179)	
(SEQ ID NO:180)	
(SEQ ID NO:181)	
(SEQ ID NO:172)	
(SEQ ID NO:173)	
hGAPDH, 516C	
Primary probe	5'-CCG CCG AGA TCA CGA TGA TCT TGA GGC T-NH2-3'
INVADER oligonucleotide	5'-TGG TGC AGG AGG CAT TGC TC-3'
ARRESTOR oligonucleotide	5'-CAG CCT CAA GAT TAC CGT GAT CT-3'
FRET Probe	5'-RED-CTC (Z28) TTC TCA GTG CG-3'
Secondary target	5'-CGC AGT GAG AAT GAG GTG ATC TCG GCG GT-3'
(SEQ ID NO:182)	
(SEQ ID NO:183)	
(SEQ ID NO:184)	
(SEQ ID NO:172)	
(SEQ ID NO:173)	

FIGURE 41B

hTGF- β

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CTC CAC GGC TC -3'
5'-AGG CGA AAG CCC TCA ATT TCC CA-3'
5'-AAC CAC TGC CGC ACA-3'
5'-GAG CCG TGG AGG AGG CG-3'
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:185)
(SEQ ID NO:186)
(SEQ ID NO:187)
(SEQ ID NO:188)
(SEQ ID NO:189)
(SEQ ID NO:190)

hMCP-1

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CTT CGG AGT TTG GG NH2 -3"
5' -GGG TTG TGG AGT GAG TGT TCA AGT A -3'
NO STACKER
5'-GGG-AAA-CTC-CGA-AGG- AGG-CG-3'
5'-FL-CAC-Z28-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:191)
(SEQ ID NO:192)

(SEQ ID NO:193)
(SEQ ID NO:189)
(SEQ ID NO:190)

hTNF- α

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC TCT GAC TGC CA NH2-3'
5' -TTG TCA CTC GGG GTT CGA GAA GAT GAA-3'
5'-GGG CCA GAG GG-3'
5'-AGG CAG TCA GAG AGG CG-3'
5'-FL-CAC-Z28-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:194)
(SEQ ID NO:195)
(SEQ ID NO:196)
(SEQ ID NO:197)
(SEQ ID NO:189)
(SEQ ID NO:190)

hIL-6

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5' -CCG TCA CGC CTC CTC ATT GAA TTNH2-3'
5' -CCA AAA GTC CAG TGA TTT TCA CCA GGC AAG TA -3'
5'-CAG ATT GGA AGC ATC CAT CT-3'
5'-GAT TCA ATG AGG AGG AGG C-3'
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:198)
(SEQ ID NO:199)
(SEQ ID NO:200)
(SEQ ID NO:201)
(SEQ ID NO:189)
(SEQ ID NO:190)

FIGURE 41C

hIL-1 β

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CAT CTG TTT AGG NH₂-3'
5'-CAG GTC CTG GAA GGA GCA CTT A-3'
5'-GCC ATC AGC TTC TTT GTT CTT GTG ATC-3'
5'-GCC CTA AAC AGA TGG AGG CG-3'
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:202)
(SEQ ID NO:203)
(SEQ ID NO:204)
(SEQ ID NO:205)
(SEQ ID NO:189)
(SEQ ID NO:190)

hIL-2

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CTC CAG TTG TAG NH₂-3'
5'-AAA ATC ATC TGT AAA TCC AGC AGT AAA TGA -3'
5'-CTG TGT TTT CTT TGT AGA AG -3'
5'-CTA CAA CTG GAG GAG GC -3'
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:206)
(SEQ ID NO:207)
(SEQ ID NO:208)
(SEQ ID NO:209)
(SEQ ID NO:189)
(SEQ ID NO:190)

hIL-8

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CTC TCA GTT CT-NH₂-3'
5'-GTG TGG TCC ACT CTC AAT CAA -3'
5'-TTG ATA AAT TTG GGG TGG AAA GGT TTG GA-3'
5'-AGA ACT GAG AGG AGG CG-3'
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:210)
(SEQ ID NO:211)
(SEQ ID NO:619)
(SEQ ID NO:620)
(SEQ ID NO:189)
(SEQ ID NO:190)

hIL-10

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC CAA ACT CAC TCA T-NH₂-3'
5'-GTC ATG TAG GCT TCT ATG TAG TTG ATG AAG ATG TA-3'
5'-GGC TTT GTA GAT GCC TTT CTC TTG GA-3'
5'-ATG AGT GAG TTT GGT GCG-3'
5'-FL-CAC (Z28)-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:621)
(SEQ ID NO:622)
(SEQ ID NO:623)
(SEQ ID NO:624)
(SEQ ID NO:189)
(SEQ ID NO:625)

FIGURE 41D

hIL-4

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC CTT GGA GGC A-NH2-3'
5'-AAG GTT TCC TTC TCA GTT GTG TTA-3'
5'-GCA AAG ATG TCT GTT ACG GTC AAC TC-3'
5'-TGC CTC CAA GGT GCG C-3'
5'-FL-CAC (Z28)-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:626)
(SEQ ID NO:627)
(SEQ ID NO:628)
(SEQ ID NO:629)
(SEQ ID NO:189)
(SEQ ID NO:625)

hIFN- γ

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC CTT CAA AAT GCC TAA-NH2-3'
5'-TGT CAC TCT CCT CTT TCC AAT TA-3'
5'-GAA AAG AGT TCC ATT ATC CGC TAC ATC TG-3'
5'-TTA GGC ATT TTG AAG GTG CGC-3'
5'-FL-CAC (Z28)-TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:630)
(SEQ ID NO:631)
(SEQ ID NO:632)
(SEQ ID NO:633)
(SEQ ID NO:189)
(SEQ ID NO:625)

FIGURE 41E

hCYP 1A2, 1193G

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC CGT TGT GTC CC-NH2-3'
5'-GGG ATG TAG AAG CCA TTC AGA-3'
5'-TTG TTG TGC TGT GGG GGA TG-3'
5'-GGG ACA CAA CGG TGC GC-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:634)
(SEQ ID NO:635)
(SEQ ID NO:636)
(SEQ ID NO:637)
(SEQ ID NO:189)
(SEQ ID NO:625)

hCYP 2B6, 343G

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'- CCG TCA CGC CTC CAC CAT ATC CC-NH2-3'
5'-CCA GCG GTT TCC ATT GGC AAA GAT CAA-3'
5'-CGG AAG AAT GGG TCG ACC ATG-3'
5'-GGG ATA TGG TGG AGG CG-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:638)
(SEQ ID NO:639)
(SEQ ID NO:640)
(SEQ ID NO:641)
(SEQ ID NO:189)
(SEQ ID NO:190)

hCYP 2C19, 223G

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC CGT TCC AGG C-NH2-3'
5'-CAT ATC CAT GCA GCA CCA CCA TGA-3'
5'-CAA AAT ACA GAG TGA ACA CAG GGC C-3'
5'-GCC TGG AAC GGT GCG C-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:642)
(SEQ ID NO:643)
(SEQ ID NO:644)
(SEQ ID NO:645)
(SEQ ID NO:189)
(SEQ ID NO:625)

hCYP 2C9, 1554T

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC ATG GAT AAT GCC C-NH2-3'
5'-CAG GTG AGA AAA GGC ATT ACA GAT AGT GAA AGC-3'
5'-CAG AGG AAA GAG AGC TGC AGG G-3'
5'-GGG CAT TAT CCA TGA GGC G-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:646)
(SEQ ID NO:647)
(SEQ ID NO:648)
(SEQ ID NO:649)
(SEQ ID NO:189)
(SEQ ID NO:190)

FIGURE 41F

hCYP 2D6, 1316G

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CCT GCT GAG AAA-NH2-3'
5'-CCC GAG GCA TGC ACG GCG GA-3'
5'-GGC AGG AAG GCC TCC-3'
5'-TTT CTC AGC AGG GAG GCG-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:650)
(SEQ ID NO:651)
(SEQ ID NO:652)
(SEQ ID NO:653)
(SEQ ID NO:189)
(SEQ ID NO:190)

hCYP 3A4, 309C

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC GCC CCA CA-NH2-3'
5'-CAG CAC AGG CTG TTG ACC ATC ATA AAA C-3'
5'-CTT TTC CAT ACT TTT TAT GAC ATT C-3'
5'-TGT GGG GCG AGG CG-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:654)
(SEQ ID NO:655)
(SEQ ID NO:656)
(SEQ ID NO:657)
(SEQ ID NO:189)
(SEQ ID NO:190)

hCYP 3A5 v2, 323T

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC AGT TGA CCT TC-NH2-3'
5'-GTG ATG GCC AGC ACA GGG C-3'
5'-ATA CGT TCC CCA CAT TTT TC-3'
5'-TGA AGG TCA ACT GTG CGC-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:658)
(SEQ ID NO:659)
(SEQ ID NO:660)
(SEQ ID NO:661)
(SEQ ID NO:189)
(SEQ ID NO:625)

hCYP 3A7, 231C

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC GTC ATA AAT ACC CC-NH2-3'
5'-GCC AGC ATA GGC TGT TGA CAC-3'
5'-AGA CTT TTC TAT ACT TTT TAT AAC ATT C-3'
5'-GGG GTA TTT ATG ACG TGC GC-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:662)
(SEQ ID NO:663)
(SEQ ID NO:664)
(SEQ ID NO:665)
(SEQ ID NO:189)
(SEQ ID NO:625)

FIGURE 41G

h/rCYP 1A1 (human: 937, rat 863G)

Primary probe
INVADER oligonucleotide (h)
INVADER oligonucleotide (r)
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CTG TCT GTG AT-NH2-3'
5'-TCC TGA CAG TGC TCA ATC AGG A-3'
5'-TCC TGA CAA TGC TCA ATG AGG A-3'
5'-GTC CCG GAT GTG GCC C-3'
5'-ATC ACA GAC AGG AGG CG-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:666)
(SEQ ID NO:667)
(SEQ ID NO:668)
(SEQ ID NO:669)
(SEQ ID NO:670)
(SEQ ID NO:189)
(SEQ ID NO:190)

h/rCYP 1A2 (813C/819C)

Primary probe
INVADER oligonucleotide (h)
INVADER oligonucleotide (r)
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC GGA CTG TTT TCT GC-NH2-3'
5'-CTT GTC AAA GTC CTG ATA GTG CTC CTC-3'
5'-CTT GTT GAA GTC TTG ATA GTG TTC CTC-3'
5'-GCA GAA AAC AGT CCG TGC GC-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:671)
(SEQ ID NO:672)
(SEQ ID NO:673)
(SEQ ID NO:674)
(SEQ ID NO:189)
(SEQ ID NO:625)

rCYP 2B1, 1017T

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC ACT GCG GTC AT-NH2-3'
5'-GTG GAT AAC TGC ATC AGT GTA TGG CAT TTT C-3'
5'-CAA GGG TTG GTA GCC TGT GTG AGC C-3'
5'-ATG ACC GCA GTG AGG CG-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:675)
(SEQ ID NO:676)
(SEQ ID NO:677)
(SEQ ID NO:678)
(SEQ ID NO:189)
(SEQ ID NO:190)

rCYP 2B2, 162T

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC AGA GCC AAT CAC-NH2-3'
5'-CGA TCA TCA AGG GAT GGT GGC CTG TGC-3'
5'-CTG ATC AAT CTC CTT TTG GAC TTT CTC TGC G-3'
5'-GTG ATT GGC TCT GAG GCG-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:679)
(SEQ ID NO:680)
(SEQ ID NO:681)
(SEQ ID NO:682)
(SEQ ID NO:189)
(SEQ ID NO:190)

FIGURE 41H

rCYP 2E1, 969G

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CTC AAT TTC TG-NH2-3'
5'-CCC TGT CAA TTT CTT CAT GAA GTT TA-3'
5'-GGT ATT TCA TGA GGA TCA GGA GC-3"
5'-CAG AAA TTG AAG AGG AGG CG-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:683)
(SEQ ID NO:684)
(SEQ ID NO:685)
(SEQ ID NO:686)
(SEQ ID NO:189)
(SEQ ID NO:190)

rCYP 3A1, 164G

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC CGG GTC CCA-NH2-3'
5'-TCC CCT GTT TCT TGA AAA GTC CAT GTG TGA-3'
5'-AAT CCG TAG AGG AGC ACC AGG-3'
5'-TGG GAC CCG GTG CGC-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:687)
(SEQ ID NO:688)
(SEQ ID NO:689)
(SEQ ID NO:690)
(SEQ ID NO:189)
(SEQ ID NO:625)

rCYP 3A2, 1091G

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-CCG TCA CGC CTC CTC GGC AGG-NH2-3'
5'-CAC AAT ATC GTA GGT AGG AGG TGC CTT AA-3'
5'-GCC CCA TCG ATC TCC TCC-3'
5'-CCT GCC GAG GAG GCG-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:691)
(SEQ ID NO:692)
(SEQ ID NO:693)
(SEQ ID NO:694)
(SEQ ID NO:189)
(SEQ ID NO:190)

rCYP 4A1, 296A

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC TAG GCT TTG CT-NH2-3'
5'-TTC ATG TAG TCA GGG TCA TAG ACA ATT AAG A-3'
5'-TCC CCA GAA CCA CCG AGG AAA GG-3'
5'-AGC AAA GCC TAG TGC GC-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:695)
(SEQ ID NO:696)
(SEQ ID NO:697)
(SEQ ID NO:698)
(SEQ ID NO:189)
(SEQ ID NO:625)

FIGURE 411

rCYP 4A2

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC AGA AGG CCC CTT-NH2-3'
5'-CCT TGA ACA GCA CCA GAA ATA GAC TGA GCA C-3'
5'-GGA AGA ACC CAG AGA CAC CAT CC-3'
5'-AAG GGG CCT TCT GTG CGC-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:699)
(SEQ ID NO:700)
(SEQ ID NO:701)
(SEQ ID NO:702)
(SEQ ID NO:189)
(SEQ ID NO:625)

rCYP 4A3, 1235C

Primary probe
INVADER oligonucleotide
Stacker
ARRESTOR oligonucleotide
FRET Probe
Secondary target

5'-AAC GAG GCG CAC GTT GTG ATA CCT T-NH2-3'
5'-GAT GAA GGC CAT AAA TTA AAA TTG TGC-3'
5'-TGG GTA TGG AAC GTC C-3'
5'-AAG GTA TCA CAA CGT GCG C-3'
5'-FL-CAC (Z28) TGC TTC GTG G-3'
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:703)
(SEQ ID NO:704)
(SEQ ID NO:705)
(SEQ ID NO:706)
(SEQ ID NO:189)
(SEQ ID NO:625)

FIGURE 47A

Oligo sequence descriptions: 5' to 3' direction, 2'-Ome nts are bolded and underlined, internal modifications defined in ()

Oligo Type	Oligo Sequence (5' to 3')	Modification	SEQ ID NO
hTNF- α			
probe	ccg ccg aga tca ctc tga ctg cct NH2		709
invader	tig tca ctc ggg gtt cga gaa gat gaa	3' Amine	710
stacker	<u>ggg cca gag ggc tga tta g</u>	<u>all 2'Ome bases</u>	711
stacker	<u>ggg cca gag ggc tga tta</u>	<u>all 2'Ome bases</u>	712
stacker	<u>ggg cca gag ggc tga at</u>	<u>all 2'Ome bases</u>	713
stacker	<u>ggg cca gag ggc t</u>	<u>all 2'Ome bases</u>	714
stacker	<u>ggg cca gag gg</u>	<u>all 2'Ome bases</u>	715
arrestor	<u>agg cag tca gag tga tc</u>	<u>all 2'Ome bases</u>	716
arrestor	<u>agg cag tca gag tga tct c</u>	<u>all 2'Ome bases</u>	717
SRT	cggaagaagcagttggatctcgccgNH2		718
FRET probe	Fcaac(Cy3)gcttctccg	3' Amine	719
probe	ccg tca cgc ctc tct gac tgc ct NH2		720
invader	tig tca ctc ggg gtt cga gaa gat gaa	3' Amine	721
stacker	<u>ggg cca gag ggc tga tta g</u>	<u>all 2'Ome bases</u>	722
arrestor	<u>agg cag tca gag agg cg</u>	<u>all 2'Ome bases</u>	723
SRT	cggaagaagcagttggagcggtgacggtNH2	3'base 2'Ome, 3'Amine	724
FRET probe	Fcaac(Cy3)gcttctccg		725
probe	ccg tca cgc ctc tct gac tgc ctg gNH2		726
invader	tig tca ctc ggg gtt cga gaa gat gaa	3' Amine	727
arrestor	<u>cca ggc agt cag aga ggc g</u>	<u>all 2'Ome bases</u>	728
SRT	cggaagaagcagttggagcggtgacggtNH2	3'base 2'Ome, 3'Amine	729
FRET probe	Fcaac(Cy3)gcttctccg		730
probe	ccg ccg aga tca ctc tga ctg cc NH2		731
invader	tig tca ctc ggg gtt cga gaa gat gaa	3' Amine	732
stacker	<u>tgg gcc aga ggg ctg att a</u>	<u>all 2'Ome bases</u>	733
arrestor	<u>agg cag tca gag tga tc</u>	<u>all 2'Ome bases</u>	734
SRT	cggaagaagcagttggatctcgccgNH2	3' Amine	735
FRET probe	Fcaac(Cy3)gcttctccg		736
probe	ccg ccg aga tca ctg atc tga ctg NH2		737
invader	ctt gtc act cgg ggt tgg aga aga c	3' Amine	738

FIGURE 47B

stacker	<u>cc</u> <u>t</u> <u>ggg</u> <u>cca</u> <u>gag</u> <u>ggc</u> <u>tga</u> <u>tt</u>	all 2'Ome bases	739
arrestor	<u>cag</u> <u>tca</u> <u>gat</u> <u>cag</u> <u>tga</u> <u>tc</u>	all 2'Ome bases	740
SRT	cggaagaagcagttggatctcgcggnh2	3' Amine	741
FRET probe	Fcaac(Cy3)gcttcctccg		742
probe	cog tca cgc ctc tct gac tgc ca nh2	3' Amine	743
probe	cog tca cgc ctc tct gac tgc cg nh2	3' Amine	744
probe	cog tca cgc ctc tct gac ggc ct nh2	3' Amine	745
probe	cog tca cgc ctc tct gac agc ct nh2	3' Amine	746
invader	tgt tca ctc ggg gtt oga gaa gat gaa		747
stacker	<u>ggg</u> <u>cca</u> <u>gag</u> <u>gg</u>	all 2'Ome bases	748
arrestor	<u>agg</u> <u>cag</u> <u>tca</u> <u>gag</u> <u>agg</u> <u>cg</u>	all 2'Ome bases	749
arrestor	<u>agg</u> <u>ccg</u> <u>tca</u> <u>gag</u> <u>agg</u> <u>cg</u>	all 2'Ome bases	750
arrestor	<u>agg</u> <u>ctg</u> <u>tca</u> <u>gag</u> <u>agg</u> <u>cg</u>	all 2'Ome bases	751
SRT	ccaggaagcaagtgaggcgigacggg	3' 3bases 2'Ome	752
FRET probe	Fcaac(Z21)gcttcctccg		753
probe	cog cog aga tca ctc tga tgc ctg gg nh2	3' Amine	754
invader	ctt gtc act cgg ggt tgg aga aga tga a		755
arrestor	<u>ccc</u> <u>agg</u> <u>cag</u> <u>tca</u> <u>gag</u> <u>tga</u> <u>tc</u> <u>nh2</u>	all 2'Ome bases, 3' Amine	756
SRT	cggaggaagcagttggatctcgcggnh2	3' 2 last base 2' Ome, 3' Amine	757
FRET probe	Fcaac(Cy3)gcttcctccg		758
hIL-1β			
probe	cog tca cgc ctc cat ctg tt agg g nh2	3' Amine	759
invader	cag gtc ctg gaa gga gca ctt a		760
stacker	<u>cca</u> <u>tca</u> <u>gct</u> <u>tct</u> <u>tgt</u> <u>ttc</u> <u>tgc</u> <u>tca</u> <u>tc</u>	all 2'Ome bases	761
arrestor	<u>gcc</u> <u>cta</u> <u>aac</u> <u>aga</u> <u>tgg</u> <u>agg</u> <u>cg</u>	all 2'Ome bases	762
SRT	cggagaagcagttggagcgigacggnh2	3'base 2'Ome, 3'Amine	763
FRET probe	Fcaac(Cy3)gcttcctccg		764
probe	cog tca cgc ctc cat ctg tt agg gc nh2	3' Amine	765
invader	cag gtc ctg gaa gga gca ctt a		766
stacker	<u>cat</u> <u>cag</u> <u>ctt</u> <u>ctt</u> <u>tgt</u> <u>tct</u> <u>tgt</u> <u>cat</u> <u>cc</u>	all 2'Ome bases	767
arrestor	<u>gcc</u> <u>cta</u> <u>aac</u> <u>aga</u> <u>tgg</u> <u>agg</u> <u>cg</u>	all 2'Ome bases	768
SRT	cggagaagcagttggagcgigacggnh2	3'base 2'Ome, 3'Amine	769
FRET probe	Fcaac(Cy3)gcttcctccg		770
probe	cog tca cgc ctc cat ctg tt agg nh2	3' Amine	771

FIGURE 47E

FRET probe	Fcaac(Cy3)gcttctccg	836
probe	gcc gtc acg cct ctt tgg gtt tgc ttg tc NH2	837
probe	gcc gtc acg cct ctt tgg gtt tgc ttg tNH2	838
invader	tggagtgaagtccaagcttcggaga	839
arrestor	gacaagcaaacccaaagaggcg	840
SRT	cggagaagcagttggaggcgtgacg	841
FRET probe	Fcaac(Cy3)gcttctccg	842
probe	cct gtc tgc ctg cct tgc gag ttg ggg	843
probe	cct gtc tgc ctg cct tgc gag ttg gg	844
invader	ggg ttg tgg agt gag tgt tca agt a	845
arrestor	ccc.aaa.ctc.cga.agg.cag.cg	846
SRT	cggaggaaagcagttggcagcgagcagc	847
SRT	cggaggaaagcagttggcagcgagcagc(Amino dA)ggNH2	848
SRT	cggaggaaagcagttggcagcg(Amino dA)gacaggNH2	849
SRT	cggaggaaagcagttggc(Amonon dA)gcagacaggNH2	850
SRT	cggaggaaagcagttggcagcg(Amino dA)gac(Amino dA)ggNH2	851
SRT	cggaggaaagcagttggc(Amino dA)gcgagc(Amino dA)ggNH2	852
SRT	cggaggaaagcagttggc(Amino dA)gcg(Amino dA)gacaggNH2	853
FRET probe	Fcaac(Cy3)gcttctccg	854
probe	gcc gtc acg cct ctg gga cac ttg ctg cNH2	855
invader	gcc aca atg gtc ttg aag atc aca gct tct ta	856
arrestor	gca.gca.agt.gtc.cca.gag.gcg.NH2	857
SRT	cggagaagcagttggaggcgtgacggcNH2	858
FRET probe	Fcaac(Cy3)gcttctccg	859
probe	cgc tca cgc ctg ctt cgg agt ttg gg NH2	860
invader	ggg ttg tgg agt gag tgt tca agt a	861
arrestor	5'-ggg-aaa-ctc-cga-agg-agg-cg-3'	862
SRT	ccaggaaagcaagtggaggcgtgacggg	863
FRET probe	Fcac(Z21)tgctctgtg	864
probe	cgc cga gat cac ctt cgg agt ttg ggNH2	865
invader	ggg ttg tgg agt gag tgt tca agt a	866
arrestor	ccc.aaa.ctc.cga.agg.tga.tc	867
SRT	cggagaagcagttgggtgatctcggcggNH2	868
FRET probe	Fcaac(Cy3)gcttctccg	869

FIGURE 47F

probe	aac gag gcg cac ctt cgg agt ttg gg NH2	3' Amine	870
invader	ggg ttg tgg agt gag tgt tca agt a		871
arrestor	ccc aaa ctc cga agg tgc g	all 2'Ome bases	872
SRT	cggagaagcagttggtgcctcgttaaNH2	3' last 5 bases 2'Ome, 3' Amine	873
FRET probe	Fcaac(Cy3)gcttctccg		874
probe	cgc tca cgc ctc ctt cgg agt ttg g NH2	3' Amine	875
invader	ggg ttg tgg agt gag tgt tca agt a		876
stacker	gtt tgc ttg tcc agg tgg	all 2'Ome bases	877
arrestor	cca aac tcc gaa gga ggc g	all 2'Ome bases	878
SRT	cggagaagcagttgagggcgacggtNH2	3'base 2'Ome, 3'Amine	879
FRET probe	Fcaac(Cy3)gcttctccg		880
probe	cgc tca cgc ctc ctt cgg agt ttg NH2	3' Amine	881
invader	ggg ttg tgg agt gag tgt tca agt a		882
stacker	gtt ttg ctt gtc cag gtg g	all 2'Ome bases	883
arrestor	cca aac tcc gaa gga ggc g	all 2'Ome bases	884
SRT	cggagaagcagttgagggcgacggtNH2	3'base 2'Ome, 3'Amine	885
FRET probe	Fcaac(Cy3)gcttctccg		886
probe	cgc tca cgc ctc ctt cgg agt ttNH2	3' Amine	887
invader	ggg ttg tgg agt gag tgt tca agt a		888
stacker	ggg ttt gct tgt cca ggt g	all 2'Ome bases	889
arrestor	cca aac tcc gaa gga ggc g	all 2'Ome bases	890
SRT	cggagaagcagttgagggcgacggtNH2	3'base 2'Ome, 3'Amine	891
FRET probe	Fcaac(Cy3)gcttctccg		892
probe	cgtcacgcctccggagttgggNH2	3' Amine	893
invader	gtt gtg gag tga gtg ttc aag tat ta		894
stacker	ttt gct tgt cca ggt ggt cca g	all 2'Ome bases	895
arrestor	ccc aaa ctc cgg agg cg	all 2'Ome bases	896
SRT	cggagaagcagttgagggcgacggtNH2	3'base 2'Ome, 3'Amine	897
FRET probe	Fcaac(Cy3)gcttctccg		898
probe	cgc cga gat cac cgg agt ttg ggNH2	3' Amine	899
invader	gtt gtg gag tga gtg ttc aag tat ta		900
stacker	ttt gct tgt cca ggt ggt cca g	all 2'Ome bases	901
arrestor	cta gtg gcc tca aac cc	all 2'Ome bases	902
SRT	cggagaagcagttggtgatctcgcggtNH2	3' Amine	903
FRET probe	Fcaac(Cy3)gcttctccg		904

FIGURE 47G

<hr/>		
hUbiquitin		
probe	cgc cga gat cac ctt tac att ttc tat cgt	3' Amine
probe	cgc cga gat cac ctt tac att ttc tat cgt NH2	
invader	5' -cct tcc tia tcc tgg atc ttg gca -3'	all 2'Ome bases 3' last 3 bases 2'Ome
arrestor	<u>acg ata gaa aat gta aag gtg atc</u>	
SRT	5'-cgc agt gag aat gag gtg atc tog gcggt-3'	
FRET probe	5'-Red-ctc-ZZ1-ttc tca gtg cg-3'	905 906 907 908 909 910
<hr/>		
hIL-2		
probe	gtttctttgtctccgcactgccNH2	3' Amine
invader	cca gca gta aat gct cca gtt gta ga	
stacker	<u>tag aac ttg aag tag gtg c</u>	all 2'Ome bases all 2'Ome bases 3' 3bases 2'Ome
arrestor	<u>caa aga aaa cac agg agg c</u>	
SRT	ccaggaaagcaagtggaggcgtagcggu	
FRET probe	Fcac(ZZ1)tgctctgtgg	911 912 913 914 915 916
<hr/>		
probe	aac gag gog cac ctg tgt ttt ctt tg NH2	3' Amine
invader	cca gca gta aat gct cca gtt gta ga	
stacker	<u>tag aac ttg aag tag gtg c</u>	all 2'Ome bases all 2'Ome bases 3' last 3 bases 2'Ome
arrestor	<u>caa aga aaa cac agg tgc g</u>	
SRT	ccaggaaagcaagtggtagcgctcgttt	
FRET probe	Fcac(ZZ1)tgctctgtgg	917 918 919 920 921 922
<hr/>		
probe	cag tca cgc ctc ctc cag ttg tag NH2	3' Amine
invader	<u>aaa atc atc tgt aaa tcc agc agt aaa tga</u>	
stacker	<u>ctg tgt ttt ctt tgt aga ac</u>	5' 6 bases 2'Ome all 2'Ome bases all 2'Ome bases 3' 3bases 2'Ome
arrestor	<u>cta caa ctg gag gag gc</u>	
SRT	ccaggaaagcaagtggaggcgtagcggu	
FRET probe	Fcac(ZZ1)tgctctgtgg	923 924 925 926 927 928
<hr/>		
probe	aac gag gog cac ctc cag ttg tag NH2	3' Amine
invader	<u>aaa atc atc tgt aaa tcc agc agt aaa tga</u>	
stacker	<u>ctg tgt ttt ctt tgt aga ac</u>	5' 6 bases 2'Ome all 2'Ome bases all 2'Ome bases 3' last 3 bases 2'Ome
arrestor	<u>cta caa ctg gag gtg cg</u>	
SRT	ccaggaaagcaagtggtagcgctcgttt	
FRET probe	Fcac(ZZ1)tgctctgtgg	929 930 931 932 933 934

FIGURE 47H

probe	ccg tca cgc ctc ctg tgt ttt ctt tgt aNH2	3' Amine	935
invader	gta aat cca gca gta aat gct cca gtt gta ga		936
stacker	<u>gaa ctt gaa gta ggt gca ctg tt</u>	<u>all 2'Ome bases</u>	937
arrestor	<u>tacaagaacacacacagagggcgNH2</u>	<u>all 2'Ome bases, 3' amine</u>	938
SRT	ccaggagcaagtgagggcgacggu	<u>3' bases 2'Ome</u>	939
FRET probe	Fcac(Z21)tgctcgigg		940
probe	aac gag gcg cac ctg tgt ttt ctt tgt aNH2	3' Amine	941
invader	gla aat cca gca gta aat gct cca gtt gta ga		942
stacker	<u>gaa ctt gaa gta ggt gca ctg tt</u>	<u>all 2'Ome bases</u>	943
arrestor	<u>tac aaa gaa aac aca ggt gcg</u>	<u>all 2'Ome bases</u>	944
SRT	ccaggagcaagtggtgcgctcgttt	<u>3' last 3 bases 2'Ome</u>	945
FRET probe	Fcac(Z21)tgctcgigg		946
probe	ccg tca cgc ctc ctc cag ttg taa NH2	3' Amine	947
probe	ccg tca cgc ctc ctc cag ttg tat NH2	3' Amine	948
probe	ccg tca cgc ctc ctc cag ttg tac NH2	3' Amine	949
invader	<u>aaa atc atc tgt aaa tcc agc agt aaa tga</u>	<u>5' 6 bases 2'Ome</u>	950
stacker	<u>ctg tgt ttt ctt tgt aga ac</u>	<u>all 2'Ome bases</u>	951
arrestor	<u>cta caa ctg gag gag gc</u>	<u>all 2'Ome bases</u>	952
SRT	ccaggagcaagtgagggcgacggu	<u>3' bases 2'Ome</u>	953
FRET probe	Fcac(Z21)tgctcgigg		954
probe	gcc gtc acg cct ccc ttc ttg atg NH2	3' Amine	955
invader	ttc tag aca ctg aag atg ttt cag ttc tgt gga		956
arrestor	<u>cat gcc caa gaa ggg agg cg NH2</u>	<u>all 2'Ome bases, 3' Amine</u>	957
SRT	cggaagaagcagttggagggcgacggcNH2	<u>3'2 bases 2'Ome, 3' Amine</u>	958
FRET probe	Fcaac(Cy3)gcttctccg		959
probe	ccg tca cgc ctc taa ttc cat tca aaa tca tct NH2	3' Amine	960
invader	cat cct ggt gag ttt ggg att ctt gta att tat a		961
stacker	<u>gta aat cca gca gta aat gct cca gNH2</u>	<u>all 2'Ome bases, 3' Amine</u>	962
arrestor	<u>aga tga ttt tga atg gaa tta gag gcg NH2</u>	<u>all 2'Ome bases, 3' Amine</u>	963
SRT	cggaagaagcagttggagggcgacggcNH2	<u>3'2 bases 2'Ome, 3' Amine</u>	964
FRET probe	Fcaac(Cy3)gcttctccg		965
probe	ccg ccg aga tca cct gtg ttt tct ttg ta		966
invader	gla aat cca gca gta aat gct cca gtt gta ga		967
stacker	<u>gaa ctt gaa gta ggt gca ctg tt</u>	<u>All 2' Ome</u>	968
stacker	gaa ctt gaa gta ggt gca ctg tt		969

FIGURE 47I

stacker	gaa ctt gaa gla ggt gca ctg tt	5' 3bases 2'Ome	970
stacker	gaa ctt gaa gla ggt gca ctg tt	5' 6bases 2'Ome	971
arrestor	tac aaa gaa aac aca ggt gat ct	All 2' Ome	972
SRT	cggaggagcagcttggtgatctgcgcgNH2	3' 2 last base 2' Ome , 3' Amine	973
FRET probe	Fcaac(Cy3)gcttcctccg		974
probe	aac gag gcg cac cct tct tgg gca tgnH2	3' Amine	975
invader	ttc tag aca ctg aag atg ttt cag ttc tgt gga		976
arrestor	cat gcc caa gaa ggg tcg gNH2	all 2'Ome bases	977
SRT	cggagaagcagcttggtgcgcctcgttaaNH2	3' last 5 bases 2'Ome , 3' Amine	978
FRET probe	Fcaac(Cy3)gcttcctccg		979
probe	aac gag gcg cac taa ttc cat tca aaa tca tct		980
invader	cat cct ggt gag ttt ggg att cti gta att tat a		981
stacker	gta aat cca gca gta aat gct cca gNH2	all 2'Ome bases, 3' Amine	982
arrestor	aga tga ttt tga atg gaa tta gtg gt NH2	all 2'Ome bases, 3' Amine	983
SRT	cggagaagcagcttggtgcgcctcgttaaNH2	3' last 5 bases 2'Ome , 3' Amine	984
FRET probe	Fcaac(Cy3)gcttcctccg		985
hIL-4			
probe	cct gtc tgc ctg cca gtt gtg ttc ttg gag NH2	3' Amine	986
invader	ccc tgc aga agg ttt cct tct a		987
invader	ccc tgc aga tgg ttt cct tct a		988
arrestor	ctc caa gaa cac aac tgg cag cNH2	all 2'Ome bases, 3' Amine	989
arrestor	ctc caa gaa cac aac tgg cag cga NH2	all 2'Ome bases, 3' Amine	990
arrestor	ctc caa gaa cac aac tgg cag cga gaNH2	all 2'Ome bases, 3' Amine	991
SRT	cggagaagcagcttggtgcgcctcgttaaNH2	3' last base 2'Ome , 3' Amine	992
FRET probe	Fcaac(Cy3)gcttcctccg		993
probe	aac gag gcg cac ctt gga ggc agc aaa NH2	3' Amine	994
probe	aac gag gcg cac ctt gga ggc agc aaNH2	3' Amine	995
invader	aag gtt tcc ttc tca gtt gtg tta		996
arrestor	ctt tgc tcg ctc caa ggt gcg NH2	all 2'Ome bases, 3' Amine	997
SRT	cggagaagcagcttggtgcgcctcgttaa NH2	3' last 5 bases 2'Ome , 3' Amine	998
FRET probe	Fcaac(Cy3)gcttcctccg		999
probe	cag tca cgt ctc tgg agg cag caa aga tg NH2	3' Amine	1000
invader	aag gtt tcc ttc tca gtt gtg ttc ta		1001
arrestor	cat ctt tgc tcg ctc cag aga cg NH2	all 2'Ome bases, 3' Amine	1002

FIGURE 47J

SRT	gctactgagatgaaggagacgtgacgtatNH2	3' Amine	1003
FRET probe	Fcttc(Cy3)tctcagtagc		1004
probe	aac gag gcg cac ctt gga ggc agc aaa g NH2		1005
invader	aag gtt tcc ttc tca gtt gtg tta	3' Amine	1006
arrestor	ctt tgc tgc ctc caa ggt ggc NH2	all 2'Ome bases, 3' Amine	1007
SRT	cggaggaagcagttgtgcccctcgttaa	3' last 5 bases 2'Ome	1008
FRET probe	Fcaac(Cy3)gcttctctccg		1009
<hr/>			
mIL-2			
probe	cgc cga gat cac ccc ttg agt ttg aca aca gNH2	3' Amine	1010
invader	gaa ttg gca ctc aaa tgt gtt gtc aga ga		1011
arrestor	act gtt gta aaa cta aag ggg gfg atc t NH2	all 2'Ome bases, 3' Amine	1012
SRT	cggaggaagcgggttggtgctcgcgcgNH2	3' last two bases are 2' Ome , 3' Amine	1013
FRET probe	Fcaac(Cy3)gcttctctccg		1014
probe	tgc cgc cga gat cac ccc ttg agt ttg aca aca gNH2	3' Amine	1015
invader	gaa ttg gca ctc aaa tgt gtt gtc aga ga		1016
arrestor	act gtt gta aaa cta aag ggg gfg NH2	all 2'Ome bases, 3' Amine	1017
arrestor	act gtt gta aaa cta aag ggg gfg at NH2	all 2'Ome bases, 3' Amine	1018
arrestor	act gtt gta aaa cta aag ggg gfg at cNH2	all 2'Ome bases, 3' Amine	1019
arrestor	act gtt gta aaa cta aag ggg gfg at ctcgNH2	all 2'Ome bases, 3' Amine	1020
SRT	cggaggaagcgggttggtgctcgcgcgcaNH2	3' Last 2bases 2'Ome, 3' Amine	1021
FRET probe	Fcaac(Cy3)gcttctctccg		1022
probe	gc cgc cga gat cac ccc ttg agt ttg aca aca gNH2	3' Amine	1023
probe	c cgc cga gat cac ccc ttg agt ttg aca aca gNH2	3' Amine	1024
invader	gaa ttg gca ctc aaa tgt gtt gtc aga ga		1025
arrestor	act gtt gta aaa cta aag ggg gfg at NH2	all 2'Ome bases, 3' Amine	1026
SRT	cggaggaagcgggttggtgctcgcgcgcgcaNH2	3' Last 2bases 2'Ome, 3' Amine	1027
FRET probe	Fcaac(Cy3)gcttctctccg		1028
probe	aac gag gcg cac ccc ttg agt ttg aca aca gt NH2	3' Amine	1029
invader	gaa ttg gca ctc aaa tgt gtt gtc aga ga		1030
arrestor	agtaactgtttgtaaaactaaagggtgcg	all 2'Ome bases, 3' Amine	1031
SRT	cggaggaagcagttgtgcccctcgttaa	3' last 5 bases 2'Ome	1032
FRET probe	Fcaac(Cy3)gcttctctccg		1033
probe	aac gag gcg cac ccc ttg agt ttg aca aca gt NH2	3' Amine	1034

FIGURE 47L

"Replacement Sheet"			
FRET probe	Fcaac(Cy3)gcttcctccg		1068
probe	ccg tca cgc ctc agt tgt ttc cgt tNH2		
invader	aga ggt aca aac gag gtt ttc caa ggc	3' Amine	1069
stacker	<u>agc taa gat ccc tgg atc aga ttt aga ga</u>	all 2'Ome bases,	1070
arrestor	<u>aac gga aac aac tga ggc g</u>	all 2'Ome bases,	1071
SRT	ccaggaagcaagtgaggcgtgacggu	3' 3bases 2'Ome	1072
FRET probe	Fcac(Z21)tgcttcgttg		1073
			1074
probe	ccg tca cgc ctc ccg tta gct aNH2		1075
invader	caa acg agg ttt tcc aag gag ttg a	3' Amine	1076
stacker	<u>aga tcc ctg gat cag att tag aga gct c</u>	all 2'Ome bases,	1077
arrestor	<u>tag cta acg gaa aga ggc g</u>	all 2'Ome bases,	1078
SRT	ccaggaagcaagtgaggcgtgacggu	3' 3bases 2'Ome	1079
FRET probe	Fcac(Z21)tgcttcgttg		1080
probe	ccg tca cgc ctc ccg tta gNH2		1081
invader	aga ggt aca aac gag gtt ttc caa gga ga	3' Amine	1082
stacker	<u>cta aga tcc ctg gat cag att tag aga g</u>	All 2'Ome	1083
arrestor	<u>ctaacggaacaagagcg</u>	All 2'Ome	1084
SRT	ccaggaagcaagtgaggcgtgacggu	3' 3bases 2'Ome	1085
FRET probe	Fcac(Z21)tgcttcgttg		1086
hIFN-γ			
probe	aac gag gcg cac ctt acc aat gcc taa gaa aag agt tNH2		1087
invader	tgc att att ttt ctg tca ctc tcc tct ttc caa tta	3' Amine	1088
arrestor	<u>aac tct ttt ctt agg cat ttt gaa ggt gcg NH2</u>	all 2'Ome bases, 3' Amine	1089
SRT	cgagggaagcagttgtgcgcctcgttaaNH2	3' last 5 bases 2'Ome	1090
FRET probe	Fcaac(Cy3)gcttcctccg		1091
probe	cag tca cgt ctc tct tca aaa tgc cta aga aaa gag tNH2		1092
invader	tct gca tta ttt ttc tgt cac tct cct ctt tcc aat a	3' Amine	1093
arrestor	<u>act ctt ttc tta ggc att ttg aag aga gac gNH2</u>	all 2'Ome bases, 3' Amine	1094
SRT	<u>gctactgagatgaaggagacgtgactgtatNH2</u>	all 2'Ome bases, 3' Amine	1095
FRET probe	Fcttc(Cy3)tcctcagtagc		1096
mIFN-γ			
probe	aac gag gcg cac cct ttt gcc agt tcc NH2	3' Amine	1097

FIGURE 47M

invader	gct ctg cag gat ttt cat gtc acc ata				1098
arrestor	gag gaa ctg gca aaa ggg tgc gNH2				1099
SRT	gtactgtagatgaaggagacgtgactgtanNH2				1100
FRET probe	Fcttc(Cy3)ctcagtagc		<u>all 2'Ome bases, 3' Amine</u> <u>all 2'Ome bases, 3' Amine</u>		1101
probe	aac gag gcg cac cct ttt gcc agt NH2		3' Amine		1102
invader	gct ctg cag gat ttt cat gtc acc ata				1103
stacker	tcc tcc aga tat cca aga aga gac tc		<u>all 2'Ome bases</u>		1104
arrestor	act ggc aaa agg cgg gc		<u>all 2'Ome bases</u>		1105
SRT	cgg agg aaag cag ttg gtc cgc ctc guu aa NH2		3' last 5 bases 2'Ome		1106
SRT	cgg aag aaag cag ttg gtc cgc ctc guu aa NH2		3' last 5 bases 2'Ome		1107
FRET probe	Fcaac(Cy3)gcttcctccg				1108
probe	gcc gca cgc cgc ctt ttg cca gt NH2		3' Amine		1109
invader	gct ctg cag gat ttt cat gtc acc ata				1110
stacker	tcc tcc aga tat cca aga aga gac tc		<u>all 2'Ome bases</u>		1111
arrestor	act ggc aaa agg cgg gc		<u>all 2'Ome bases</u>		1112
SRT	cgg agg aag cag ttg cgg cgt gcg gca NH2				1113
FRET probe	Fcaac(Cy3)gcttcctccg				1114
probe	aac gag gcg cac cct ttt gcc agt tc NH2		3' Amine		1115
invader	gct ctg cag gat ttt cat gtc acc ata				1116
stacker	ctc cag ata tcc aag aag aga ctc		<u>all 2'Ome bases</u>		1117
arrestor	gaa ctg gca aaa ggg tgc g		<u>all 2'Ome bases</u>		1118
SRT	cggaggagcagttggtgcgcctctttaaNH2		3' last 5 bases 2'Ome		1119
FRET probe	Fcaac(Cy3)gcttcctccg				1120
hIL-8					
probe	cgg tca cgc ctc ctt ggc aaa act gca ccNH2		3' Amine		1121
probe	cgg tca cgc ctc ctt ggc aaa act gca cca NH2		3' Amine		1122
invader	ctt tat gca ctg aca tct aag ttc ttt agc act ca				1123
arrestor	tgg tgc agt ttt gcc aag gag ggc NH2		<u>all 2'Ome bases, 3' Amine</u>		1124
arrestor	tgg tgc agt ttt gcc aag gag ggc tg NH2		<u>all 2'Ome bases, 3' Amine</u>		1125
SRT	cggagaagcagttgagggcgtgacggcNH2		3' 2 bases 2'Ome, 3' Amine		1126
FRET probe	Fcaac(Cy3)gcttcctccg				1127
probe	cgg tca cgc ctc ctt cac tga ttc ttg gNH2		3' Amine		1128
probe	cgg tca cgc ctc ctt cac tga ttc ttg gNH2		3' Amine		1129
invader	agt gtt gaa gta gat ttt ctt gaa gtt tca ctg ga				1130

FIGURE 47N

stacker	gat acc aca gag aat gaa tttt	all 2'Ome bases	1131
arrestor	tcc aag aat cag tga aga tgg agg cg NH2	all 2'Ome bases, 3' Amine	1132
arrestor	tcc aag aat cag tga aga tgg agg cgt gNH2	all 2'Ome bases, 3' Amine	1133
arrestor	g aat cag tga aga tgg agg cg	all 2'Ome bases	1134
SRT	cggagaagcagttggaggcgtgacggcNH2	3'2 bases 2'Ome, 3'Amine	1135
FRET probe	Fcaac(Cy3)gcttcctccg		1136
probe	cgc tca cgc cct tgg ctc aat ttt gct NH2	3' Amine	1137
invader	cca ttc aat tcc tga aat taa agt tgc gat att ctc ttg gca		1138
invader	cc tga aat taa agt tgc gat att ctc ttg gca	5' 10 bases are 2'Ome	1139
invader	cc tga aat taa agt tgc gat att ctc ttg gca		1140
arrestor	agc aaa att gag cca agg gag gcg NH2	all 2'Ome bases, 3' Amine	1141
arrestor	agc aaa att gag cca agg gag gcg tNH2	all 2'Ome bases, 3' Amine	1142
SRT	cggagaagcagttggaggcgtgacggcNH2	3'2 bases 2'Ome, 3'Amine	1143
FRET probe	Fcaac(Cy3)gcttcctccg		1144
probe	cgc tca cgc ctc cat ctt cac tga ttc ttg NH2	3' Amine	1145
invader	ttc tag caa acc cat tca att cct gaa att aaa gtt cgg ata ttc ta		1146
invader	cc cat tca att cct gaa att aaa gtt cgg ata ttc ta	5' 10 bases 2'Ome	1147
invader	cc cat tca att cct gaa att aaa gtt cgg ata ttc ta		1148
arrestor	cca agg gcc aag gag gcg tNH2		1149
SRT	cggagaagcagttggaggcgtgacggcNH2	3'2 bases 2'Ome, 3'Amine	1150
FRET probe	Fcaac(Cy3)gcttcctccg		1151
probe	cgc tca cgc ctc cat ctt cac tga ttc ttg NH2	3' Amine	1152
invader	agt gtt gaa gla gat ttg ctt gaa gtt tca ctg ga		1153
stacker	ttg gat acc aca gag aat gaa tt	all 2'Ome bases	1154
SRT	cggagaagcagttggaggcgtgacggcNH2	3'base 2'Ome, 3'Amine	1155
FRET probe	Fcaac(Cy3)gcttcctccg		1156
probe	cgc tca cgc ctc cat ctt cac tga tt NH2	3' Amine	1157
invader	agt gtt gaa gla gat ttg ctt gaa gtt tca ctg ga		1158
stacker	ctt gga tac cac aga gaa tga att		1159
SRT	cggagaagcagttggaggcgtgacggcNH2	3'base 2'Ome, 3'Amine	1160
FRET probe	Fcaac(Cy3)gcttcctccg		1161
probe	cgc tca cgc ctc cat ctt cac tga ttc ttg NH2	3' Amine	1162
invader	agt gtt gaa gla gat ttg ctt gaa gtt tca ctg ga		1163
helper	ata-cca-cag-aga-atg-aat-ttt-ttt-atg	all 2'Ome bases	1164
arrestor	tcc aag aat cag tga aga tgg agg cgt gNH2	all 2'Ome bases, 3' Amine	1165

FIGURE 470

SRT FRET probe	cggaagaagcagttggaggcgtgacgggNH2 Fcaac(Cy3)gcttcctccg	3'base 2'Ome , 3'Amine	1166 1167
SRT FRET probe	cggaagaagcagttgggtatctcggcgNH2 Fcaac(Cy3)gcttcctccg	3' Amine	1168 1169
SRT FRET probe	cggaagaagcagttggaggcgtgacgggNH2 Fcaac(Cy3)gcttcctccg	3'base 2'Ome , 3'Amine	1170 1171
SRT FRET probe	ccaggaagcaagtgaggcggtgacggu Fcac(Z21)tgcttcgtgg	3' 3bases 2'Ome	1172 1173
SRT FRET probe	cggaggaaagcagttgggtatctcggcgNH2 Fcaac(Cy3)gcttcctccg	3' 2 last base 2'Ome , 3' Amine	1174 1175
SRT FRET probe	cggagaagcagttggaggcggtgacggcNH2 Fcaac(Cy3)gcttcctccg	3'2 bases 2'Ome , 3'Amine	1176 1177
SRT FRET probe	ccaggaagcaagtggtgcgcctcgttt Fcac(Z21)tgcttcgtgg	3' last 3 bases 2'Ome	1178 1179
SRT FRET probe	cggaggaaagcagttgggtgcgcctcgttaaNH2 Fcaac(Cy3)gcttcctccg	3' last5 bases 2'Ome	1180 1181
SRT FRET probe	cggaggaaagcagttgggtatctcggcggaNH2 Fcaac(Cy3)gcttcctccg	3' Last 2bases 2'Ome , 3' Amine	1182 1183
SRT FRET probe	gctactgagatgaaggagacgtgactgtatNH2 Fcttc(Cy3)tcicagtagc	3' Amine	1184 1185
SRT FRET probe	ccaggaagcagttggaggcggtgacgggNH2 Fcaac(Cy3)gcttcgtgg	3' 2 bases 2'Ome , 3'Amine	1186 1187
h3A4 probe h3A4 invader Capture Sequence	agg agc cac tcc att gga tga agc atg tac aga atc ccc ggt tat tta tgc aga		1188 1189

Set 1

FIGURE 47P

h3A4 probe	glg gcg tat cac aga caa tga gag	1190
h3A4 invader	cct cct tta tat tcc caa gta taa cac tct aa	1191
Capture Sequence		
Set 2/Set 3		
h3A4 probe	AAC GAG GCG CAC CAC AGA CAA TGA GAG	1192
h3A4 arrestor	CCTCATTCCTCTGCTGGTGG-NH2	1193
h3A4 invader	cct cct tta tat tcc caa gta taa cac tct aa	1194
h3A4 stacking oligo	agctcaatgcatgtacagaatccccgg	1195
h3A4 stacking oligo	agctcaatgcatgtacagaatccccgg	1196
SRT		
FRET Oligo		
Set 4		
h3A4 probe	aac gag gcg cac cac aga caa tga gag ag-NH2	1197
h3A4 arrestor	ctc tct cat tgt ctg tgg tgc g-NH2	1198
h3A4 invader	cct cct tta tat tcc caa gta taa cac tct aa	1199
h3A4 stacking oligo	ctc aat gca tgt aca gaa tcc ccg gtt	1200
SRT		
FRET Oligo		
Set 5		
h3A4 probe	aac gag gcg cac cac aga caa tga gag agc t-NH2	1201
h3A4 arrestor	agg tct ctc att gtc tgt ggt gcg-NH2	1202
h3A4 invader	cct cct tta tat tcc caa gta taa cac tct aa	1203
SRT		
FRET probe	FL-caa-c(cy3)g-ctt-cct-ccg	1204
Set 6		
h3A4 probe	aac gag gcg cac cac aga caa tga gag agc-NH2	1205
h3A4 arrestor	gct ctc tca ttg tct gtg gtc cg-NH2	1206
h3A4 invader	cct cct tta tat tcc caa gta taa cac tct aa	1207
SRT		
FRET probe	FL-caa-c(cy3)g-ctt-cct-ccg	1208
Set 7/Set 8		
h3A4 probe	aac gag gcg cac cac aga caa tga gag a-NH2	1209
h3A4 probe	aac gag gcg cac cac aga caa tga gag a	1210
h3A4 arrestor	tct ctc att gtc tgt ggt gcg c-NH2	1211
h3A4 stacking oligo	gct caa tgc atg tac aga atc ccc ggt t	1212

FIGURE 47Q

h3A4 invader SRT FRET Oligo	cct cct tta tat tcc caa gta taa cac tct aa	1213
Set 9		
h3A4 probe	aac gag gcg cac cac aga caa tga ga-NH2	1214
h3A4 arrestor	tct cat tgt ctg tgg tgc gc-NH2	1215
h3A4 invader	cct cct tta tat tcc caa gta taa cac tct aa	1216
h3A4 stacking oligo SRT FRET Oligo	gag ctc aat gca tgt aca gaa tcc ccg	1217
Set 1/Set 2		
h3A4 probe	AACGAGGCGCACCTCTTATCAGAGCTC	1218
h3A4 probe	AACGAGGCGCACCTCTTATCAGAGCTC-NH2	1219
h3A4 invader	tig tgg agg aaa tta ttg aga aat gtt gat ta	1220
h3A4 arrestor SRT	GAGCTCTGATAAGAGGGTGCG-NH2	1221
Set 1/ Set 2/ Set 3		
h3A4 probe	cgg tca cgc ctc gcc cca ca - NH2	1222
h3A4 arrestor	tgt ggg gcg agg cg	1223
h3A4 invader	cag cac agg ctg ttg acc atc ata aaa c	1224
h3A4 stacking oligo	cuu-uuc-cau-acu-uuu-uau-gac-auu-c	1225
h3A4 stacking oligo	ctt ttc cag act tt tat gac att c	1226
h3A4 stacking oligo SRT FRET	ctt ttc cag act tt tat gac	1227
Set 4/Set 5		
h3A4 probe	cgg tca cgc ctc gcc cca ca	1228
h3A4 probe	cgg tca cgc ctc gcc cca ca - HEX	1229
h3A4 invader	cag cac agg ctg ttg acc atc ata aaa c	1230
h3A4 stacking oligo SRT FRET	cuu-uuc-cau-acu-uuu-uau-gac-auu-c	1231
Set 6/ Set 7/ Set 8		
h3A4 probe	cgg tca cgc ctc gcc cca cc - NH2	1232

FIGURE 47R

h3A4 probe	cgc tca cgc ctc gcc cca cg - NH2	1233
h3A4 probe	cgc tca cgc ctc gcc cca ct - NH2	1234
h3A4 arrestor	tgt ggg gcg agg cg	1235
h3A4 invader	cag cac agg ctg ttg acc atc ata aaa c	1236
h3A4 stacking oligo	cuu-uuc-cau-acu-uuu-uau-gac-auu-c.	1237
SRT		
FRET		
<hr/>		
Set 1		
h3A4 probe	cgc tca cgc ctg atc ata aaa gcc c - NH2	1238
h3A4 arrestor	ggg ctt tta tga tca ggc g	1239
h3A4 invader	cag cac agg ctg ttg acc c	1240
h3A4 stacking oligo	cac act ttt cca tac ttt tta tg	1241
SRT		
FRET		
<hr/>		
Set 2		
h3A4 probe	aac gag gcg cac cca ttg gat gaa g - NH2	1242
h3A4 arrestor	ctt cat cca atg ggt gcg c	1243
h3A4 invader	gta cag aat ccc cgg tta ttt atg cag ta	1244
h3A4 stacking oligo	ccc atc ttc att tca gag	1245
SRT		
FRET		
<hr/>		
Set 1		
h3A5 probe	gtg gcg tat cgt gtc taa ttt caa g	1246
h3A5 invader	aat ggg ttt ttc tgg ttg aag aag tcc ttg a	1247
Capture Sequence		
<hr/>		
Set 2/Set 3		
h3A5 probe	AACGAGGCGCACCGTGCTAATTTCAAG	1248
h3A5 probe	AACGAGGCGCACCGTGCTAATTTCAAGG-Pi	1249
h3A5 arrestor	CTTGAATTAGACACGGTGCG-NH2	1250
h3A5 invader	aat ggg ttt ttc tgg ttg aag aag tcc ttg a	1251
SRT		
FRET		
<hr/>		
Set 4		
h3A5 probe	AACGAGGCGCACCGTGCTAATTTCAAG	1252
h3A5 arrestor	CTTGAATTAGACACGGTGCG-NH2	1253

FIGURE 47S

h3A5 invader	aat ggg ttt ttc tgg ttg aag aag tcc ttg a	1254
h3A5 stacking oligo	ggg atc tgt gtt tct tta caa ggt	1255
SRT		
FRET		
Set 5		
h3A5 probe	AACGAGGCGCACCGTGCTCTAATTTCGAAG	1256
h3A5 arrestor	<u>ctt gaa att aga cac ggt tct c</u>	1257
h3A5 invader	ggt ttt tct ggt tga aga agt cct tga	1258
h3A5 stacking oligo	<u>ggg atc tct gtt tct</u>	1259
SRT		
FRET		
Set 6		
h3A5 probe	AACGAGGCGCACCGTGCTCTAATTTCGAAGG-NH2	1260
h3A5 arrestor	<u>CCCTTGAAATTAGACACGGTGCG-NH2</u>	1261
h3A5 invader	aat ggg ttt ttc tgg ttg aag aag tcc ttg a	1262
SRT		
FRET probe	FL- <u>caa-c(cy3)g-ctt-cct-ccg</u>	1263
Set 7/Set 8		
h3A5 probe	aac gag gcg cac cgt gtc taa ttt caa gg-NH2	1264
h3A5 probe	aac gag gcg cac cgt gtc taa ttt caa gg	1265
h3A5 arrestor	<u>cct tga aat tag aca cgg tgc gc-NH2</u>	1266
h3A5 arrestor	<u>cct tga aat tag aca cgg tgc gc</u>	1267
h3A5 invader	aat ggg ttt ttc tgg ttg aag aag tcc ttg a	1268
h3A5 stacking oligo	gga tct gfg ttt ctt tac aag gtt tga agg ag	1269
SRT		
FRET		
Set 9		
h3A5 probe	aac gag gcg cac cgt gtc taa ttt caa-NH2	1270
h3A5 arrestor	<u>tig aaa tta gac acg gtg cgc-NH2</u>	1271
h3A5 invader	aat ggg ttt ttc tgg ttg aag aag tcc ttg a	1272
h3A5 stacking oligo	ggg gat ctg tgt ttc ttt aca agg	1273
SRT		
FRET		
Set 10		
h3A5 probe	aac gag gcg cac cgt gtc taa ttt ca - NH2	1274

FIGURE 47T

h3A5 arrestor	tga aat tag aca cgg tgc gc	1275
h3A5 invader	ggg ttt tct ggt tga aga agt cct tga	1276
h3A5 stacking oligo	agg gga tct gtc ttt ct	1277
SRT		
FRET		
Set 1		
h3A5 probe	tgg cgt atc tga ccc ttt ggg aat	1278
h3A5 invader	gaa gag cat aag ttg gaa tca cca cca ta	1279
Capture Sequence		
Set 1		
h3A5 probe	ata cgg ttg gtc ctc tca agt cta	1280
h3A5 invader	ccc cat tga ttt caa cat ctt tct tgc aac	1281
Capture Sequence		
Set 2/Set 3		
h3A5 probe	aac gag gcg cac gog tgt cta att tc - NH2	1282
h3A5 arrestor	gaa att aga cac gcg tgc gc	1283
h3A5 invader	ggg ttt tct ggt tga aga agt cct tc	1284
h3A5 stacking oligo	ccg ggg atc tgt gtt tc	1285
SRT		
FRET		
h3A5 probe	ccg tca cgc ctc gog tgt cta att tc -NH2	1286
h3A5 arrestor	gaa att aga cac gcg agg cg	1287
h3A5 invader	ggg ttt tct ggt tga aga agt cct tc	1288
h3A5 stacking oligo	ccg ggg atc tgt gtt tc	1289
SRT		
FRET		
Set 1		
h3A5 probe	aac gag gcg cag ttc ata cgt tcc -NH2	1290
h3A5 arrestor	gga acg tat gaa ctg cgc	1291
h3A5 invader	cca gca cag gga gtt gac ca	1292
h3A5 stacking oligo	cca cat ttt tcc ata ctt t	1293
SRT		
FRET		
Set 2		

FIGURE 47U

h3A5 probe	ccg tca cgc ctg ttc ata cgt tcc -NH2	1294
h3A5 arrestor	gga.acg.tat.gaa.cag.gcg	1295
h3A5 invader	cca gca cag gga gtt gac ca	1296
h3A5 stacking oligo	cca.cat.ttt.tcc.ata.ctt.t	1297
SRT		
FRET		
<hr/>		
Set 1-Set 4		
h3A5 probe	aac gag gcg cac agt tga cct tca	1298
h3A5 probe	aac gag gcg cac agt tga cct tca	1299
h3A5 probe	aac gag gcg cac agt tga cct tca - HEX	1300
h3A5 arrestor	tga.agg.tca.act.gtg.cgc	1301
h3A5 invader	gig atg gcc agc aca ggg c	1302
h3A5 stacking oligo	tac.gtt.ccc.cac.att.ttt.c	1303
h3A5 stacking oligo	tac gtt ccc cac att ttt c	1304
SRT		
FRET		
Set 5		
h3A5 probe	ccg tca cgc ctg agt tga cct tca	1305
h3A5 arrestor	tga.agg.tca.act.gag.gcg	1306
h3A5 invader	gig atg gcc agc aca ggg c	1307
h3A5 stacking oligo	tac.gtt.ccc.cac.att.ttt.c	1308
SRT		
FRET		
Set 6		
h3A5 probe	aac gag gcg cac tcc tct caa gt -NH2	1309
h3A5 arrestor	act.tga.gag.gag.tgc.gc	1310
h3A5 invader	cca ttg att tca aca tct ttc ttg caa ga	1311
h3A5 stacking oligo	cta.ata.gca.act.ggg.aat.aat.c	1312
SRT		
FRET		
Set 7		
h3A5 probe	ccg tca cgc ctg tcc tct caa gt - NH2	1313
h3A5 arrestor	act.tga.gag.gag.agg.cg	1314
h3A5 invader	cca ttg att tca aca tct ttc ttg caa ga	1315
h3A5 stacking oligo	cta.ata.gca.act.ggg.aat.aat.c	1316
SRT		

FIGURE 47V

FRET		
Set 8	aac gag gcg cac agt tga cct tc - NH2	1317
h3A5 probe	tga agg tca act gfg cgc	1318
h3A5 arrestor	gfg atg gcc agc aca ggg c	1319
h3A5 invader	ata cgt tcc sca cat ttc tc	1320
h3A5 stacking oligo		
SRT		
FRET		
Set 1	tgg cgt atc tgg att aaa tct taa aag	1321
h3A7 Probe	gac tt t tat tga gag aac gaa tgg atc taa a	1322
h3A7 Invader		
Capture Oligo		
Set 2	AACGAGGCGCACTGGATTAAATCTTAAAAG	1323
h3A7 Primary Probe	gac tt t tat tga gag aac gaa tgg atc taa a	1324
h3A7 Invader	CTTTAAGATTTAATCCAGTGCG-NH2	1325
h3A7 Arrestor		
SRT		
FRET		
Set 3	AACGAGGCGCACTGGATTAAATCTTAAAAG	1326
h3A7 Primary Probe	gac tt t tat tga gag aac gaa tgg atc taa a	1327
h3A7 Invader	CTTTAAGATTTAATCCAGTGCG-NH2	1328
h3A7 Arrestor	ctt ctt ggt gtt ttc ca	1329
h3A7 Stacking Oligo		
SRT		
FRET		
Set 4	agg agc cac tca tcc ctt gac t	1330
h3A7 Probe	ctt agg gaa atc agg ctc cac tta cgg ta	1331
h3A7 Invader oligo		
Capture Oligo		
Set 5/Set 6	AACGAGGCGCACCTCATCCCTTGACT	1332
h3A7 Primary Probe	AACGAGGCGCACCTCATCCCTTGACT-NH2	1333
h3A7 Primary Probe	AGICAAGGGATGAGGIGCG-NH2	1334
h3A7 Arrestor	ctt agg gaa atc agg ctc cac tta cgg ta	1335
h3A7 Invader oligo		

FIGURE 47W

SRT	FRET	Sequence
Set 7 - Set 10		
h3A7 Primary Probe	1336	aac gag gcg cac ctc atc cct tga c-NH2
h3A7 Arrestor	1337	gtc_aag_gga_tga_ggt_gcg_c-NH2
h3A7 Invader oligo	1338	ctt agg gaa atc agg ctc cac tta cgg ta
h3A7 Stacking Oligo	1339	tca gcc ttg aga aca atg ggt ttg tct ggt ag3'
h3A7 Stacking Oligo	1340	tca_gcc_ttg_aga_aca_atg_ggt_ttg_tct_g
h3A7 Stacking Oligo	1341	ctc_agc_cct_tag_aac_aat_ggg_ttc_t
h3A7 Stacking Oligo	1342	ctc_agc_cct_tag_aac_aat_ggg_ttc_ttc_t
SRT		
FRET		
Set 11		
h3A7 Primary Probe	1343	aac gag gcg cac ctc atc cct tga-NH2
h3A7 Primary Probe	1344	aac gag gcg cac ctc atc cct tga c
h3A7 Arrestor	1345	tca_agg_gat_gag_gtg_cgc-NH2
h3A7 Invader oligo	1346	ctt agg gaa atc agg ctc cac tta cgg ta
h3A7 Stacking Oligo	1347	ctc agc ctt tag aac aat ggg ttc ttc tgc tag
SRT		
FRET		
Set 1		
h3A7 Probe	1348	ata cgg ttg gta aag taa ttg gag gt
h3A7 Invader	1349	gaa gcc cgt ctt cat ttc agg gtt cta ttt c
Capture Sequence		
Set 2		
h3A7 Primary Probe	1350	AACGAGGCGCACGTAAGTAATTTGAGGT
h3A7 Invader	1351	gaa gcc cgt ctt cat ttc agg gtt cta ttt c
h3A7 Arrestor	1352	ACCTCAAAATTACTTTACGTGCG-NH2
SRT		
FRET		
Set 3		
h3A7 Primary Probe	1353	AACGAGGCGCACGTAAGTAATTTGAGGT
h3A7 Invader	1354	gaa gcc cgt ctt cat ttc agg gtt cta ttt c
h3A7 Arrestor	1355	ACCTCAAAATTACTTTACGTGCG-NH2
h3A7 Stacking Oligo	1356	ctc_tgg_tgt_tct_tct_ggg

FIGURE 47X

FIGURE 47A

SRT FRET			
	Set 1		
	h3A7 probe	cgg tca cgc ctc gat ata aat acc cc - NH2	1357
	h3A7 arrestor	ggg gtc ttg atg acg agg cg	1358
	h3A7 invader	gcc agc ata gcc tgt tga cac	1359
	h3A7 stacking oligo	aga ctt ttc tat act ttg tat aac att c	1360
	SRT FRET		
	Set 2 - Set 4		
	h3A7 probe	aac gag gcg cac gtc ata aat acc cc -NH2	1361
	h3A7 probe	aac gag gcg cac gtc ata aat acc cc	1362
	h3A7 probe	aac gag gcg cac gtc ata aat acc cc - HEX	1363
	h3A7 arrestor	ggg gta ttg atg acg tgc gc	1364
	h3A7 invader	gcc agc ata gcc tgt tga cac	1365
	h3A7 stacking oligo	aga ctt ttc tat act ttg tat aac att c	1366
	SRT FRET		
	Set 1		
	h3A7 probe	cgg tca cgc ctc gat taa atc tta aaa gct t - NH2	1367
	h3A7 arrestor	aag ctt tta aga ttg aat cga ggc g	1368
	h3A7 invader	gac ttg tat tga gag aac gaa tgg atc taa tgc	1369
	h3A7 stacking oligo	ctt ggt gtt ttc cac aaa g	1370
	SRT FRET		
	Set 2		
	h3A7 probe	aac gag gcg cac gat taa atc tta aaa gct t -NH2	1371
	h3A7 arrestor	aag ctt tta aga ttg aat cgt gcg c	1372
	h3A7 invader	gac ttg tat tga gag aac gaa tgg atc taa tgc	1373
	h3A7 stacking oligo	ctt ggt gtt ttc cac aaa g	1374
	SRT FRET		
	Set 1		
	h3A7 probe	cgg tca cgc ctg tca tcc ctt g - NH2	1375
	h3A7 arrestor	caa ggg atg cac ggc g	1376

FIGURE 47Y

h3A7 invader	gga aat cag gct cca ctt acg gtc a	1377
h3A7 stacking oligo	act cag cct tta gaa caa tg	1378
SRT		
FRET		
<hr/>		
Set 1		
h3A7 probe	ccg tca cgc ctc taa agt aat ttg agg tc - NH2	1379
h3A7 arrestor	gac ctc aaa tta ctt tag agg cg	1380
h3A7 invader	cgt ctt cat ttc agg gtt cta ttt ga	1381
h3A7 stacking oligo	tct ggt gtt ctg gg	1382
SRT		
FRET		
Set 2		
h3A7 probe	aac gag gcg cac taa agt aat ttg agg tc - NH2	1383
h3A7 arrestor	gac ctc aaa gga ctt tag tgc gc	1384
h3A7 invader	cgt ctt cat ttc agg gtt cta ttt ga	1385
h3A7 stacking oligo	tct ggt gtt ctg gg	1386
SRT		
FRET		
<hr/>		
Set 1		
r4A1 Probe	tgg-cgt-atc-tag-gct-ttg-ctt-cc	1387
r4A1 Invader	ttc atg tag tca ggg tca tag aca att aag a	1388
Capture Sequence		
Set 2		
r4A1 Primary Probe	AACGAGCGCACTAGGCTTTGCTTCC	1389
r4A1 Arrestor	GGAAGCAAAGCCTAGTGCG-NH2	1390
r4A1 Arrestor	gga agc aaa gcc tag tgc gc-NH2	1391
r4A1 Invader	ttc atg tag tca ggg tca tag aca att aag a	1392
FRET Probe 1		
Set 3		
r4A1 Primary Probe	aac gag gcg cac tag gct ttg ctt ccc-NH2	1393
r4A1 Arrestor	ggg aag caa agc cta gtg cgc-NH2	1394
r4A1 Invader	ttc atg tag tca ggg tca tag aca att aag a	1395
SRT		
FRET Probe 1		

FIGURE 47Z

[illegible]

FIGURE 47AA

SRT					
FRET Probe 1					
Set 3					
r4A1 Primary Probe	AACGAGGCGCACGTCCTTGACCTGC-Pi				1418
r4A1 Arrestor	GGCAGGTC AAG AACGIGCG -NH2				1419
r4A1 Invader	agg aga tat gtt gaa aga tt cta tag agg ac				1420
SRT					
FRET Probe 1					
Set 1					
r4A1 Probe	tgg cgt atc tta gat gga gta agg a				1421
r4A1 Invader	att cct cat aat tca aaa ggg act tag tag gt				1422
Set 2					
r4A1 Primary Probe	AACGAGGCGCACTTAGATGGAGTAAGGA				1423
r4A1 Arrestor	TCCTTACTCCATCTAAGIGCG -NH2				1424
SRT					
FRET Probe 1					
Set 1					
r4A1 Primary Probe	aac gag gcg cac tgg ata ccc ttg gg-NH2				1425
r4A1 Arrestor	ccc.aag.ggt.atc.cag.tgc.gc -NH2				1426
r4A1 Invader	ggt gga gac cat aaa tgg aga gtg tga cta				1427
SRT					
FRET Probe 1					
Set 1					
r4A2 Probe	aac gag gcg cac agg tgt ctg gag taa aag-NH2				1428
r4A2 Arrestor	ctt.tta.ctc.cag.aca.cct.gtg.cgc -NH2				1429
r4A2 Invader	gtc cac gca caa gct ggg ac				1430
SRT					
FRET Probe 1					
Set 1					
r4A2 Probe	aac gag gcg cac aga agg ccc ctt-NH2				1431
r4A2 Arrestor	aag.ggg.cct.tct.gtg.cgc -NH2				1432
r4A2 Invader	cct tga aca gca cca gaa ala gac tga gca c				1433
r4A2 stacking oligo	gga aga acc cag aga cac cat cc				1434
SRT					

FIGURE 47AB

FIGURE 4 / AD

FRET Probe 1				
Set 2				
r4A2 Probe	cgc tca cgc ctc aga agg ccc ctt-NH2			1435
r4A2 Arrestor	aag ggg cct tct gag gcg-NH2			1436
r4A2 Invader	cct tga aca gca cca gaa ata gac tga gca c			1437
SRT				
FRET Probe 1				
Set 3				
r4A2 Probe	aac gag gcg cac aga agg ccc ctt g-NH2			1438
r4A2 Arrestor	caa ggg gcc ttc tgt gcg c-NH2			1439
r4A2 Invader	cct tga aca gca cca gaa ata gac tga gca c			1440
SRT				
FRET Probe 1				
Set 4				
r4A2 Probe	aac gag gcg cac aga agg ccc ctt gg-NH2			1441
r4A2 Probe	aac gag gcg cac aga agg ccc ctt			1442
r4A2 Probe	aac gag gcg cac aga agg ccc ctt - HEX			1443
r4A2 Arrestor	cca agg ggc ctt ctg tgc gc-NH2			1444
r 4A2 Arrestor	aag ggg cct tct gtg cgc)			1445
r4A2 Invader	cct tga aca gca cca gaa ata gac tga gca c			1446
SRT				
FRET Probe 1				
Set 1				
r4A3 Probe	aac gag gcg cac ttg aca gag tcc gc-NH2			1447
r4A3 Arrestor	gcg gac tct gtc aag tgc gc-NH2			1448
r4A3 Invader	gct tct ccc att tgt cta gca tta taa			1449
SRT				
FRET Probe 1				
Set 2				
r4A3 Probe	aac gag gcg cac ttg aca gag tcc g-NH2			1450
r4A3 Arrestor	cgg act ctg tca agt gcg c-NH2			1451
r4A3 Invader	gct tct ccc att tgt cta gca tta taa			1452
r4A3 stacking oligo	cca tga tt tga cat agg gtt tga gga tg			1453
SRT				
FRET Probe 1				

FIGURE 47AC

Set 3		
r4A3 Probe	aac gag gcg cac ttg aca gag tcc-NH2	1454
r4A3 Probe	aac gag gcg cac ttg aca gag tcc	1455
rCYP 4A3 Probe	aac gag gcg cac ttg aca gag tcc - HEX	1456
r4A3 Arrestor	gga ctc tgt caa gtg cgc-NH2	1457
rCYP 4A3 Arrestor	gga ctc tgt caa gtg cgc	1458
r4A3 Invader	gct tct ccc att tgt cta gca tta taa	1459
r4A3 stacking oligo	gcc atg att ttg aca tag ggt ttg agg atg	1460
SRT		
FRET Probe 1		
Set 1		
r2B1 probe	cgg agc ctc tgc ggt cat caa g	1461
r2B1 invader	tgg ata act gca tca gtg tat ggc att tta a	1462
Capture Sequence		
Set 2/ Set 3		
r2B1 probe	gtg-gcg-tat-ctg-cgg-tca-tca-ag	1463
r2B1 probe	gtg-gcg-tat-ctg-cgg-tca-tca-a	1464
r2B1 invader	tgg ata act gca tca gtg tat ggc att tta a	1465
Capture Sequence		
Set 4		
r2B1 probe	tg-gcg-tat-ctg-cgg-tca-tca-a	1466
r2B1 invader	tgg ata act gca tca gtg tat ggc att tta a	1467
Capture Sequence		
Set 5 - Set 7		
r2B1 probe	aac-gag-gcg-cac-ctg-cgg-tca-tca-a	1468
r2B1 arrestor	ttg-atg-acc-gca-ggt-gcg-cc-NH2	1469
r2B1 arrestor	ttg-atg-acc-gca-ggt-gcg-cc-Pi	1470
r2B1 arrestor	ttg-atg-acc-gca-ggt-gcg-cc-OH	1471
r2B1 invader	tgg ata act gca tca gtg tat ggc att tta a	1472
SRT		
FRET		
Set 8		
r2B1 probe	aac-gag-gcg-cac-ctg-cgg-tca-tca-a	1473

FIGURE 47AD

r2B1 arrestor	tig-atg-acc-gca-ggt-gcg-cc-Pi	1474
r2B1 invader	tgg ata act gca tca gtg tat ggc att tta a	1475
r2B1 stacker	ggg ttg gta gcc tgt gtg agc cga t	1476
SRT		
FRET		
Set 9		
r2B1 probe	aac-gag-gcg-cac-ctg-cgg-tca-tca-a-NH2	1477
r2B1 arrestor	tig-atg-acc-gca-ggt-gcg-NH2	1478
r2B1 invader	tgg ata act gca tca gtg tat ggc att tta a	1479
SRT		
FRET		
Set 10		
r2B1 probe	ggc-aac-gag-gca-cac-ctg-cgg-tca-tca-ag-Pi	1480
r2B1 arrestor	tig-atg-acc-gca-ggt-gcg-cc-Pi	1481
r2B1 invader	tgg ata act gca tca gtg tat ggc att tta a	1482
SRT		
FRET		
Set 11		
r2B1 probe	aac gag ggg cac ctg cgg tca tca ag-NH2	1483
r2B1 arrestor	ctt gat gac cgc agg tgc c-NH2	1484
r2B1 invader	tgg ata act gca tca gtg tat ggc att tta a	1485
SRT		
FRET		
Set 12		
r2B1 probe	aac gag gcg cac ctg cgg tca tca agg-NH2	1486
r2B1 arrestor	cct tga tga ccg cag gtg cg-NH2	1487
r2B1 invader	tgg ata act gca tca gtg tat ggc att tta a	1488
SRT		
FRET		
Set 13		
r2B1 probe	atg acg tga cag acc tgc ggt cat caa g-NH2	1489
r2B1 arrestor	ctt gat gac cgc agg tct gt-NH2	1490
r2B1 invader	tgg ata act gca tca gtg tat ggc att tta a	1491
SRT		
FRET		

FIGURE 47AE

Set 14	aac gag gcg cac ctg agg tca tca a-NH2	1492
r2B1 probe	ttg atg acc tca ggt gcg-NH2	1493
r2B1 arrestor	tgg ata act gca tca gtg tat ggc att tta a	1494
r2B1 invader		
SRT		
FRET		
Set 15	cag tca cgt ctc ctg cgg tca tca ag-NH2	1495
r2B1 probe	ctt gat gac cgc agg aga cg-NH2	1496
r2B1 arrestor	tgg ata act gca tca gtg tat ggc att tta a	1497
r2B1 invader		
SRT		
FRET		
Set 16	cag tca cgt ctc act gcg gtc atc aag-NH2	1498
r2B1 probe	gtg gat aac tgc atc agt gla tgg cat ttt c	1499
r2B1 invader	ctt gat gac cgc agt gag acg-NH2	1500
r2B1 arrestor		
SRT		
FRET		
Set 17	cag tca cgt ctc act gcg gtc atc aa-NH2	1501
r2B1 probe	ttg atg acc gca gtg aga cg-NH2	1502
r2B1 arrestor	gtg gat aac tgc atc agt gla tgg cat ttt c	1503
r2B1 invader	ggg ttg gta gcc tgt gtg agc cga t	1504
r2B1 stacker		
SRT		
FRET		
Set 18	cag tca cgt ctc act gcg gtc atc a-NH2	1505
r2B1 probe	tga tga ccg cag tga gac g-NH2	1506
r2B1 arrestor	gtg gat aac tgc atc agt gla tgg cat ttt c	1507
r2B1 invader	agg gtt ggt agc ctg tgt gag ccg a	1508
r2B1 stacker		
SRT		
FRET		
Set 19	cag tca cgt ctc act gcg gtc atc aag-NH2	1509
r2B1 probe		

FIGURE 47AF

r2B1 arrestor	ctt gat gac cgc agt gag acg-NH2	1510
r2B1 invader	gtg gat aac tgc atc agt gla tgg cat ttt c	1511
r2B1 stacker	ggg tgg tag cct gfg tga gcc gat c	1512
SRT		
FRET		
Set 20		
r2B1 probe	cag tca cgt ctc act gcg gtc atc-NH2	1513
r2B1 arrestor	atg acc gca gfg aga cg-NH2	1514
r2B1 invader	gtg gat aac tgc atc agt gla tgg cat ttt c	1515
r2B1 stacker	caa ggg ttg gta gcc tgt gfg agc c	1516
SRT		
FRET		
Set 21		
r2B1 probe	ccg tca cgc ctc act gcg gtc atc a-NH2	1517
r2B1 arrestor	tga tga ccc cag tga ggc g-NH2	1518
r2B1 invader	gtg gat aac tgc atc agt gla tgg cat ttt c	1519
r2B1 stacker	agg gtt ggt agc ctg tgt gag ccg a	1520
SRT		
FRET		
Set 22		
r2B1 probe	ccg tca cgc ctc act gcg gtc atc-NH2	1521
r2B1 arrestor	gat gac cgc agt gag gcg-NH2	1522
r2B1 invader	gtg gat aac tgc atc agt gla tgg cat ttt c	1523
r2B1 stacker	aag ggt tgg tag ccg gfg tg	1524
Set 23		
r2B1 probe	ccg tca cgc ctc act gcg gtc atc-NH2	1525
r2B1 probe	ccg tca cgc ctc act gcg gtc at	1526
r2B1 arrestor	atg acc gca gfg agg cg-NH2	1527
r2B1 invader	gtg gat aac tgc atc agt gla tgg cat ttt c	1528
r2B1 stacker	caa ggg ttg gta gcc tgt gfg agc c	1529
SRT		
FRET		
Set 1		
r2B1 invader	atg gfg tct ttg gfg act cfg tgt ggt aca	1530
r2B1 probe	aac-gag-gcg-cac-tcc-aat-agg-gac-aag	1531

FIGURE 47AG

r2B1 arrestor SRT FRET	ctt-gtc-cct-att-gga-gtg-cgc-c	1532
Set 1		
r2B1 probe	gcg gcg tac agc cgg tgt gag c	1533
r2B1 invader	cat ttg act gcg gtc atc aag ggt tgg tc	1534
Capture Sequence		
r2B1 probe	tgg cgt atg agc cgg tgt gag c	1535
r2B1 invader	cat ttg act gcg gtc atc aag ggt tgg tc	1536
Capture Sequence		
Set 1		
r2B2 invader	gga tga ctg cat cag tgt atg gca ttg tgc	1537
r2B2 probe	aac-gag-gcg-cac-gta-cga-tca-tca-agg	1538
r2B2 arrestor	cct-tga-tga-tcg-tac-gtg-cgc-c-NH2	1539
SRT FRET		
Set 1		
r2B2 invader	atg gtg tct ttg gtg act ctg tgt ggt aac	1540
r2B2 probe	tgg cgt atg acc aat tgg ggc aa	1541
r2B2 stacker	gat ctg caa atc tct gaa tct cgt gga tg	1542
r2B2 invader stacker	tct tgg aga gca ggt acc ctc gga ac	1543
Set 2		
r2B2 probe	tgg cgt atg acc aat tgg ggc aag	1544
r2B2 invader	atg gtg tct ttg gtg act ctg tgt ggt aac	1545
r2B2 stacker	atc tgc aaa tct ctg aat ctc gtg gat ga	1546
r2B2 invader stacker	tct tgg aga gca ggt acc ctc gga ac	1547
Set 3		
r2B2 probe	aac-gag-gcg-cac-acc-aat-tgg-ggc-aag	1548
r2B2 probe	aac gac gcg cac acc aat tgg ggc aag	1549
r2B2 arrestor	ctt-ggc-cca-att-ggt-gtg-cgc-c-NH2	1550
r2B2 invader	atg gtg tct ttg gtg act ctg tgt ggt aac	1551
SRT FRET		

FIGURE 47AI

r2B2 invader r2B2 arrestor SRT FRET	gta tgg cat ttt ggt acg atc atc aag ggc sac.agg.cca.cca.tga.gac.g-NH2	1570 1571
Set 10 r2B2 probe r2B2 invader r2B2 arrestor r2B2 stacker SRT FRET	cag tca cgt ctc aga gcc aat cac ctg-NH2 cga tca tca agg gat ggt ggc ctg tgc cag.ctg.att.ggc.tct.gag.acg-NH2 atc aat ctc ctt ttg gac tt ctc tgc g	1572 1573 1574 1575
Set 11 r2B2 probe r2B2 invader r2B2 arrestor r2B2 stacker SRT FRET	cag tca cgt ctc aga gcc aat cac ct-NH2 cga tca tca agg gat ggt ggc ctg tgc agg.tga.ttg.gct.ctg.aga.cg-NH2 gat caa tct cct ttt gga ctt tct ctg c	1576 1577 1578 1579
Set 12 r2B2 probe	FAM-cag tca cgt ctc aga gcc aat cac ct-NH2	1580
Set 13 / Set 14 r2B2 probe r2B2 arrestor r2B2 invader r2B2 stacker r2B2 invader SRT FRET	cag tca cgt ctc aga gcc aat cac c-NH2 ggg.gat.tgg.ctc.tga.gac.g-NH2 cga tca tca agg gat ggt ggc ctg tgc gat caa tct cct ttt gga ctt tct ctg c tga tca atc tcc tt tgg act ttc tct gc	1581 1582 1583 1584 1585
Set 15 r2B2 probe r2B2 arrestor r2B2 stacker r2B2 invader SRT FRET	cag tca cgt ctc aga gcc aat cac-NH2 gtg.att.ggc.tct.gag.acg-NH2 ctg atc aat ctc ctt ttg gac tt ctc tgc g cga tca tca agg gat ggt ggc ctg tgc	1586 1587 1588 1589

FIGURE 47AJ

Set 16		
r2B2 probe	cag tca cgt ctc aga ggc aat cac ct-NH2	1590
r2B2 arrestor	agg tga ttg cct ctg aga cg-NH2	1591
r2B2 invader	cga tca tca aga gat ggt ggc ctg tgc	1592
r2B2 stacker	gat caa tct cct ttt gga ctt tct ctg c	1593
SRT		
FRET		
Set 17		
r2B2 probe	cag tca cgt ctc aga ggc aat cac ctg-NH2	1594
r2B2 arrestor	cag gtg att gcc tct gag acg-NH2	1595
r2B2 invader	cga tca tca aga gat ggt ggc ctg tgc	1596
r2B2 stacker	atc aat ctc ctt ttg gac ttt ctc tgc g	1597
SRT		
FRET		
Set 18		
r2B2 probe	ccg tca cgc ctc aga gcc aat cac ct-NH2	1598
r2B2 arrestor	agg tga ttg gct ctg agg cg-NH2	1599
r2B2 invader	cga tca tca agg gat ggt ggc ctg tgc	1600
r2B2 stacker	gat caa tct cct ttt gga ctt tct ctg c	1601
SRT		
FRET		
Set 19		
r2B2 probe	ccg tca cgc ctc aga gcc aat cac c-NH2	1602
r2B2 arrestor	ggt gat tgg ctc tga ggc g-NH2	1603
r2B2 invader	cga tca tca agg gat ggt ggc ctg tgc	1604
r2B2 stacker	tga tca atc tcc ttt tgg act ttc tct gc	1605
SRT		
FRET		
Set 20-21		
r2B2 probe	ccg tca cgc ctc aga gcc aat cac-NH2	1606
r2B2 probe	ccg tca cgc ctc aga gcc aat cac	1607
r2B2 arrestor	gtg att ggc tct gag gcg-NH2	1608
r2B2 invader	cga tca tca agg gat ggt ggc ctg tgc	1609
r2B2 stacker	ctg atc aat ctc ctt ttg gac ttt ctc tgc g	1610

FIGURE 47AK

Set 22																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
--------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

FIGURE 47AL

r3A1 invader	tcc cct gtt tct tga aaa gtc cat gtg tga	1637
r3A1 probe	aac gag gcg cac cgg gtc cca aat c-NH2	1638
r3A1 arrestor	gat ttg gga ccc ggt gcg-NH2	1639
r3A1 probe	aac gag gcg cac cgg gtc cca aat c-NH2	1640
r3A1 arrestor	gga ttt ggg acc cgg tgc gc-NH2	1641
r3A1 probe	aac gag gcg cac cgg gtc cca aat-NH2	1642
r3A1 arrestor	att tgg gac ccg gtg cgc-NH2	1643
r3A1 stacker	ccg tag agg agc acc agg acg	1644
r3A1 probe	aac gag gcg cac cgg gtc cca aa-NH2	1645
r3A1 arrestor	ttt ggg acc cgg tgc gc-NH2	1646
r3A1 stacker	tcc gta gag gag cac cag ga	1647
r3A1 probe	cag tca cgt ctg cgg gtc cca aa-NH2	1648
r3A1 arrestor	ttt ggg acc cgg aga cg-NH2	1649
r3A1 stacker	tcc gta gag gag cac cag ga	1650
r3A1 probe	ccg tca cgc ctg cgg gtc cca aa-NH2	1651
r3A1 arrestor	ttt ggg acc cgg agg cg-NH2	1652
r3A1 stacker	tcc gta gag gag cac cag ga	1653
r3A1 probe	aac gag gcg cac cgg gtc cca-NH2	1654
r3A1 arrestor	tgg gac ccg gtg cgc-NH2	1655
r3A1 probe	ccg tca cgc ctg cgg gtc cca-NH2	1656
r3A1 arrestor	tgg gac ccg gag gcg-NH2	1657
r3A1 stacker	aat ccg tag agg agc acc agg	1658
r3A1 probe	aac gag gcg cac cgg gtc cca	1659
		1660
<hr/>		
r3A2 invader	ttc ctt gtt tct taa aaa ttc cat gtc taa	1661
r3A2 invader	att ttt cga tac ttt tta tag cac tcc atc	1662
r3A2 probe	tgg cgt atc tgg gtt cca agt c	1663
r3A2 probe	aac gag gcg cac gtc aaa tct ccc taa	1664
r3A2 probe	aac-gag-gcg-cac-tgg-gtt-cca-agt-c	1665
r3A2 arrestor	tta ggg aga ttt gac gtg cgc c - NH2	1666
r3A2 arrestor	gac-ttg-gaa-ccc-agt-gcg-cc-NH2	1667
r3A2 probe	aac gag gcg cac tgg gtt cca agt c	1668
r3A2 probe	aac-gag-gcg-cac-tgg-gtt-cca-agt-c-Pi	1669
r3A2 arrestor	gac ttg gaa ccc agt gcg-NH2	1670
r3A2 probe	aac gag gcg cac tgg gtt cca agt cg-NH2	1671
r3A2 arrestor	cga ctt gga acc cag tgc gc-NH2	1672
r3A2 probe	aac gag gcg cac aac cat cca gtt cta ta-NH2	1673

FIGURE 47AM

r3A2 invader	gga atc gtc act act gac cct ttg ggt ata aac ac	1674
r3A2 stacker	tct ttt tta cag act ctc tca agt cta tta cc	1675
r3A2 arrestor	tat aga act tga tgg ttg tgc gc-NH2	1676
r3A2 probe	aac gag gcg cac aac cat caa gtt cta-NH2	1677
r3A2 stacker	tat ctt ttt tac aga ctc tct caa gtc tat tac c	1678
r3A2 arrestor	tag aac ttg atg gtt gtc cgc-NH2	1679
r3A2 probe	cag tca cgt ctc ctc ggc agg gc-NH2	1680
r3A2 invader	cac aat atc gta ggt agg agg tgc ctt aa	1681
r3A2 arrestor	gcc ctg ccg agg aga cg-NH2	1682
r3A2 probe	cag tca cgt ctc ctc ggc agg g-NH2	1683
r3A2 stacker	ccc cat cga tct cct cct g	1684
r3A2 arrestor	ccc tgc cga gga gac g-NH2	1685
r3A2 probe	cag tca cgt ctc ctc ggc agg-NH2	1686
r3A2 stacker	gcc cca tgc atc tcc tcc	1687
r3A2 arrestor	cct gcc gag gag acg-NH2	1688
r3A2 probe	cag tca cgt ctc ctc ggc ag-NH2	1689
r3A2 stacker	ggc ccc atc gat ctc ctc	1690
r3A2 arrestor	ctg ccg agg aga cg-NH2	1691
r3A2 probe	ccg tca cgc ctc ctc ggc agg-NH2	1692
r3A2 arrestor	cct gcc gag gag cgc-NH2	1693
r3A2 stacker	gcc cca tgc atc tcc tcc	1694
r3A2 probe	ccg tca cgc ctc ctc ggc agg	1695
hICAM-1 probe	ccg tca cgc ctc ggc ttg tgt gtt c-NH2	1696
hICAM-1 invader	ccg gga tag gtt cag gga ggc gtc	1697
hICAM-1 stacker	ggt ttc atg ggg gtc cct	1698
hICAM-1 arrestor	gaa cac aca agc cga ggc g	1699
hVCAM-1 probe	ccg tca cgc ctc gcc ttt gtt tgg-NH2	1700
hVCAM-1 arrestor	cca aac aaa gcc gag gcg	1701
hVCAM-1 invader	ggg caa cat tga cat aaa gtt ttt gcg tac tct c	1702
hVCAM-1 stacker	ggt cga att cca tgt cat c	1703
hVCAM-1 probe	ccg tca cgc ctc gcc ttt gtt tg-NH2	1704
hVCAM-1 arrestor	caa aca aag gcg agg cg	1705
hVCAM-1 stacker	ggt tgc aat tcc atg tca tc	1706
hGAPDH probe	aac gag gcg cac gct cct gga aga tg-NH2	1707
hGAPDH arrestor	cat ctt cca gga gcg tgc gcc-NH2	1708

FIGURE 47AN

hGAPDH invader	cac ttg att ttg gag gga tct ca	1709
Secondary system oligos		
Capture Oligo	aaa agt ggc tcc t-(biotin)c	1710
Capture Oligo	aaa aga ggc tcc gct-(biotin)c	1711
Capture Oligo	aaa atg tac gcc gct-(biotin) c	1712
Capture Oligo	aaa aga tac gcc aca gct-(biotin) c	1713
Capture Oligo	aaa acc aac cgt atg aac t-(biotin) c	1714
Capture Oligo	aaa atc ata cgc cac t-(biotin)c	1715
SRT	cgg-agg-aag-cag-ttg-gtg-tgc-clc-gtt-ggc-tt-NH2	1716
SRT	cgg agg aag cag ttg gtg ccc ctc ctc gtt aa-NH2	1717
SRT	cgg aag aag cag ttg gtg cgc ctc ctc gtt aa-NH2	1718
SRT	cgg aag aag cag ttg gtg cgc ctc ctc gtt aa-NH2	1719
SRT	cgg aag aag cag ttg gtg cgc ctc ctc gtt aa	1720
SRT	cgg aag aag cag ttg gtg cgc ctc ctc gtt aa	1721
SRT	cgg aag aag cag ttg gtg cgc ctc ctc gtt aa	1722
SRT	cgg aag aag cag ttg gag gcg tga cgg t-NH2	1723
SRT	cgg aag aag cag ttg gag gcg tga cgg a-NH2	1724
SRT	cgg aag aag cag ttg gag gcg tga cgg a	1725
SRT	cgg aag aag cag ttg gag gcg tga cgg t	1726
SRT	cgg aag aag cag ttg gag gcg tga cgg t	1727
SRT	cgg aag aag cag ttg gag gcg tga cgg t	1728
SRT	cgg aag aag cag ttg gag gcg tga cgg a	1729
FRET probe	FL-caa c(cy3)gc ttc ctc	1730
FRET probe	FL-caa c(cy3)gc ttc ctc c	1731
FRET probe	FL-caa-c(cy3)g-ctt-cct-ccg	1732
FRET probe	FL-caa-c(cy3)g-ctt-cct-ccg-uuu	1733
FRET probe	FL-caa-c(cy3)g-ctt-cct-ccg-uuu-u	1734
FRET probe	FL-caa-c(cy3)g-ctt-cct-ccg-NH2	1735

Oligo sequence descriptions:
 C18ddC = C18 linker+dideoxy C, ddC = dideoxy C, FI = Fluorescein

Oligo Type	Oligo Sequence	SEQ ID NO
HUMAN IL-2		
Human IL-2 Probe	FI- CGAAATTAATACGCCCTTCCTGGGCAIGTAC -C18ddC	1736
Human IL-2 Probe	CGAAATTAATACGCCCTTCCTGGGCAIGTAC -C18ddC	1737
Human IL-2 Invader	CTGAAGATGTTTCAGTCTGTG- ddC	1738
Human IL-2 Invader	GAAGATGTTTCAGTCTGTGGC	1739
Human IL-2 Probe	TCACCTCCTACCTTCCTGGGCAIGTAA	1740
Human IL-2 Probe	TCACCTCCTACCTTCCTGGGCAIGTAAAC	1741
Human IL-2 Probe	TCACCTCCTACCTTCCTGGGCAIGTAA- C18ddC	1742
Human IL-2 Invader	GAAGATGTTTCAGTCTGTGG- ddC	1743
Human IL-2 Probe	FI- ACTTCCTACTTAATTCCTCAAAATC	1744
Human IL-2 Probe	ACTTCCTACTTAATTCCTCAAAATC - C18ddC	1745
Human IL-2 Invader	GAGTTGGGATCTTGTAAATTAT-ddC	1746
Human IL-2 Probe	FI- CGTGTCTGTGGCGTATCTTAATTCCTCAAAATC	1747
Human IL-2 Probe	CGTGTCTGTGGCGTATCTTAATTCCTCAAAATC	1748
Human IL-2 Invader	GAGTTGGGATCTTGTAAATTAT - ddC	1749
Human IL-2 Probe	FI- CGTGTCTGTGGCGTATCTTAATTCCTCAAAATC	1750
Human IL-2 Probe	CGTGTCTGTGGCGTATCTTAATTCCTCAAAATC	1751
Human IL-2 Probe	FI- CGTGTCTGTGGCGTATCTTAATTCCTCAAAATC	1752
Human IL-2 Probe	CGTGTCTGTGGCGTATCTTAATTCCTCAAAATC	1753
Human IL-2 Invader	GAGTTGGGATCTTGTAAATTAT-ddC	1754
HUMAN β-ACTIN		
Human β -actin Probe	FI-TTCCTACTCTTGATCTTCATGTGC	1755
Human β -actin Invader	CTCAGGAGGAGCAATGATCTT	1756
Human β -actin Invader	CTCAGGAGGAGCAATGAT	1757
Human β -actin Probe	FI-TCATCTCTACTCTGGGTCACTTCCTCG -C18ddC	1758
Human β -actin Probe	TCATCTCTACTCTGGGTCACTTCCTCG -C18ddC	1759
Human β -actin Invader	GTGTTGAAGGCTCTCAAAACATGAT- ddC	1760
Human β -actin Invader	GGGTGTGAAGGCTCTCAAAACATGAT - ddC	1761
Human β -actin Probe	FI- CGTGTCTGTGGCGTATCTGGGTCACTTCCTCG	1762
Human β -actin Probe	CGTGTCTGTGGCGTATCTGGGTCACTTCCTCG	1763
Human β -actin Invader	GGGTGTGAAGGCTCTCAAAACATGAT - ddC	1764
HUMAN GAPDH		
Human GAPDH Probe	FI- TTCATACGGTTGGTAGTTGAGGICAAATG	1765
Human GAPDH Probe	TTCATACGGTTGGTAGTTGAGGICAAATG	1766
Human GAPDH Invader	GGAATCATATTGGAAACATGTAACCATC	1767
Human GAPDH Probe	FI- TTCATACGGTTGGCTCTCTGGGAAGATG	1768

FIGURE 47AP

Human GAPDH Probe	TTCATACGGTTGGCCTCCTGGAAGAIG	1769
Human GAPDH Invader	CACTTGATTTTGGAGGGATCTCA	1770
Human/Mouse/Rat GAPDH Probe	TTCATACGGTTGGTAGTTGAGGTCAAIG	1771
Mouse/Rat GAPDH Invader	AGAAATCATACTGGAAACATGTAGACCATC	1772
Mouse GAPDH Probe	FI-TGGCGTATCACTAGTAGIIGA	1773
Mouse GAPDH Probe	TGGCGTATCACTAGTAGIIGA	1774
Mouse GAPDH Invader	GGAGTCATACTGGAACATGTAGACC	1775
Mouse GAPDH Probe	TGGCGTATCACTAGTAGIIGA	1776
Mouse GAPDH Invader	AGTCATACTGGAACATGTAGACA	1777
Mouse GAPDH Invader	GGAGTCATACTGGAACATGTAGACA	1778
MOUSE IL-6		
Mouse IL-6 Probe	FI- TGGCGTATCTCTTTTCTCTCAII	1779
Mouse IL-6 Probe	TGGCGTATCTCTTTTCTCTCAII	1780
Mouse IL-6 Invader	ACAATCAGAAATTGCCATTGCACAACA	1781
MOUSE ONCOSTATIN M		
Mouse Oncostatin M Probe	FI-GAAGGCAGAGGACCGTGAGGC	1782
Mouse Oncostatin M Probe	GAAGGCAGAGGACCGTGAGGC	1783
Mouse Oncostatin M Invader	AAGACATCTGGTGTGTAGTGA	1784
Mouse Oncostatin M Probe	FI-TGGCGTATCTCTCTCCAGAGAAAGC	1785
Mouse Oncostatin M Probe	TGGCGTATCTCTCTCCAGAGAAAGC	1786
Mouse Oncostatin M Invader	CACTGAGCCGATGAAGCGATGGTAA	1787
Mouse Oncostatin M Probe	FI- TGGCGTATCTAGGGCTCCCAAGAG	1788
Mouse Oncostatin M Probe	TGGCGTATCTAGGGCTCCCAAGAG	1789
Mouse Oncostatin M Invader	GTGTTCAGGTTTTGGAGGCGGATAA	1790
Mouse Oncostatin M Probe	FI-TGGCGTATCTAGGGCTCCCAAG	1791
Mouse Oncostatin M Probe	TGGCGTATCTAGGGCTCCCAAG	1792
Mouse Oncostatin M Invader	GTGTTCAGGTTTTGGAGGCGGATAA	1793
FRET Probe	FI-ATTCTCY3)TCTCAGA-3'NH2	1794
FRET Probe	FI-ATTCTCY3)TCTCAGAC-3'NH2	1795
FRET Probe	FI-ATTCTCY3)TCTCAGACT-3'NH2	1796
SRT	CAGTCTGAGATGAATGATACGCCAGG-3'NH2	1797
Mouse Oncostatin M Arrestor	CTTGGAGCCCTAGATA-NH2	1798
Mouse Oncostatin M Arrestor	CTTGGAGCCCTAGAT-NH2	1799
Mouse Oncostatin M Arrestor	CTTGGAGCCCTAGA-NH2	1800
Mouse Oncostatin M Probe	CTGGCGTATCTAGGGCTCCCA	1801
Mouse Oncostatin M Probe	CCTGGCGTATCTAGGGCTCCCA	1802
Mouse Oncostatin M Probe	GTGTTCAGGTTTTGGAGGCGGATAA	1803
Mouse Oncostatin M Invader	CAGTCTGAGATGAATGATACGCCAGG-3'NH2	1804
SRT	CTTGGAGCCCTAGAT-NH2	1805
Arrestor		
Mouse Oncostatin M Probe	FI-CTCTCTCTCTCTCTAGGGCTCCCA	1806

FIGURE 47AQ

Mouse Oncostatin M Probe	CTCTCTCGTCTCTAAGGGCTCCA	1807
Mouse Oncostatin M Invader	GTGTTTCAGGTTTTGGAGGCGGATAA	1808
SRT	CAGTCTGAGATGAATGAGACGAGAGAGI-NH2	1809
Mouse Oncostatin M Arrestor	CTTGAGCCCTAGAG-NH2	1810
Mouse Oncostatin M Probe	FI- TGGCGTATCTAAGGGCTCCA	1811
Mouse Oncostatin M Probe	TGGCGTATCTAAGGGCTCCA	1812
Mouse Oncostatin M Invader	GTGTTTCAGGTTTTGGAGGCGGATAA	1813
Mouse Oncostatin M Probe	TGGCGTATCTCCCCAGAGAAA	1814
Mouse Oncostatin M Probe	TGGCGTATCTCCCCAGAGA	1815
Mouse Oncostatin M Invader	CACTGAGCCGATGAAGCGATGGTAA	1816
Mouse Oncostatin M Probe	TGGCGTATCTATAGGGCTC	1817
Mouse Oncostatin M Invader	GTGTTTCAGGTTTTGGAGGCGGAA	1818
Mouse Oncostatin M Probe	CTCTCTCGTCTCTTTCAGGTTTIG	1819
Mouse Oncostatin M Invader	GGCAGCTCTCAGGTCAGGTGTGA	1820
Mouse Oncostatin M Invader	AGGCAGCTCTCAGGTCAGGTGTGA	1821
SRT	CAGTCTGAGATGAATGAGACGAGAGAGI-NH2	1822
FRET Probe	FI-ATTCT(CY3)TCTCAGAC-3'NH2	1823
Mouse Oncostatin M Arrestor	CAAAACCTGAAGAGA-3'NH2	1824
Mouse Oncostatin M Arrestor	CAAAACCTGAAGAGA-3'NH2	1825
Mouse Oncostatin M Arrestor	CAAAACCTGAAGAGACG-3'NH2	1826
Mouse Oncostatin M Probe	FI-CTCTCTCGTCTCTTCAGGTTTIG	1827
Mouse Oncostatin M Probe	CTCTCTCGTCTCTTCAGGTTTIG-NH2	1828
Mouse Oncostatin M Invader	GGCAGCTCTCAGGTCAGGTGTGA	1829
Mouse Oncostatin M Stacker	GAGGCGGATATAGGGCT- Biotin TEG	1830
HUMAN ONCOSTATIN M		
Human Oncostatin M Probe	CTCTCTCGTCTCTAAGGACTTA	1831
Human Oncostatin M Probe	CTCTCTCGTCTCTAAGGACTTA	1832
Human Oncostatin M Invader	GAACAGGAGTGCAAGGACCAGACA	1833
Human Oncostatin M Probe	TACGTCTCTTCAGGTTTIG	1834
Human Oncostatin M Probe	GTCACGTCTCTTCAGGTTTIG	1835
Human Oncostatin M Probe	AGTCACGTCTCTTCAGGTTTIG	1836
Human Oncostatin M Probe	CAGTCAGTCTCTTCAGGTTTIG	1837
Human Oncostatin M Invader	AGGCAGCTCTCAGGTCAGGTGTGA	1838
FRET Probe 1	FI-CAAC(CY3)GCTTCCTCCG	1839
SRT	CGGAGGAAGCAGTTGGAGACGTGACTGIGG-NH2	1840
SRT with mismatch	CGGAAGAACGAGTTGGAGACGTGACTGIGG-NH2	1841
SRT with mismatch	CGGACGAAGCAGTTGGAGACGTGACTGIGG-NH2	1842

FIGURE 47AR

bold indicates 2' o-methyl bases

Oligo Type	Oligo Sequence	Oligo #	SEQ ID NO
SECONDARY SYSTEM:			
SET 1			
FRET probe 1	5'-F-CAAC(CY3)GCTTCCTCCG-3'	DB04001F6	1843
secondary target	5'-CGGAAGAAAGCAGTTGGTGCGCCTCG IIAA -NH2	649-10-01	1844
SET 2			
FRET probe 1	5'-F-CAAC(CY3)GCTTCCTCCG-3'	DB04001F6	1845
secondary target	5'-CGGAAGAAAGCAGTTGGAGGCGTGACGGT-NH2-3'	641-60-03	1846
h2C19 designs 2			
probe	5'-AACGAGGCGCAGATGTCCATCGA-NH2-3'	971-26-09	1847
stacker	5'-TTCITGGTGTTCTTTACTTTCTC-3'	971-26-12	1848
invader	5'-GCAATCAATAAGTCCCGAGGGTTGTC	971-26-11	1849
arrestor	5'-TCGATGGACATCGTGCGC-3'	971-26-10	1850
SET 1			
h 2D6 p450 designs			
probe	5'-CCGTCACGCGCTCTCACCCATCT-NH2-3'	971-11-01	1851
stacker	5'-CTGGTCGCCGCACCT-3'	971-11-04	1852
invader	5'-TGTAGGGCATGTGAGCCTGGA-3'	971-11-03	1853
arrestor	5'-AGATGGGAGAGAGGCG-3'	971-11-02	1854
SET 2			
probe	5'-CCGTCACGCGCTCGAAGCCCTGT-NH2-3'	971-11-05	1855
stacker	5'-ACTTCGATGTCACGGGATGTCATATGG-3'	971-11-08	1856
invader	5'-GAGTGTCGTTCCCTTAGGGATGCCG-3'	971-11-08	1857
arrestor	5'-ACAGGGCTTCGAGGCG-3'	971-11-06	1858
SET 2			
probe	5'-CCGTCACGCGCTCCCTGCTGAGAAAAG-NH2-3'	971-11-09	1859
stacker	5'-GCAGGAAGGCGCTCCG-3'	971-11-12	1860
invader	5'-CCCGAGGCATGCACGGCGGA-3'	971-11-11	1861
arrestor	5'-CTTCTCAGCAGGGAGGCG-3'	971-11-10	1862
SET 2			

FIGURE 47AS

h 2D6 shroter designs	probe	5'-CCGTCACGCCTCCCTGCTGAGAAA-HEX-3'	1051-12-06	1863
	probe	5'-CCGTCACGCCTCCCTGCTGAGAAA-3'	1051-12-05	1864
	probe	5'-CCGTCACGCCTCCCTGCTGAGAAA-NH2-3'	971-38-01	1865
	invader	5'-CCCGAGGATGCACGGCGGA-3'	971-11-11	1866
	stacker	5'-GGCAGGAAGGCCTCC-3'	971-38-03	1867
	arrestor SET 2	5'-TTTCTCAGCAGGAGGCGG-3'	971-38-02	1868
	probe	5'-CCGTCACGCCTCCCTGCTGAGA-NH2-3'	971-38-07	1869
	invader		971-11-11	
	stacker	5'-AAGGCAGGAAGGCCTCC-3'	971-38-09	1870
	arrestor SET 2	5'-TCTCAGCAGGAGGCG-3'	971-38-08	1871
	probe	5'-CCGTCACGCCTCCCTGCTGAGAA-NH2-3'	971-38-04	1872
	invader		971-11-11	
	stacker	5'-AGGCAGGAAGGCCTGG-3'	971-38-06	1873
	arrestor SET 2	5'-TTCTCAGCAGGAGGCG-3'	971-38-05	1874
	probe	5'-CCGTCACGCCTCCCTGCTGAGAAA-NH2-3'	971-11-09	1875
	invader		971-11-11	
	stacker	5'-GCAGGAAGGCCTCG-3'	971-11-12	1876
	arrestor SET 2	5'-CTTTCTCAGCAGGAGGCGG-3'	971-11-10	1877
h 2B6 p450 alt. Splice designs	probe	5'-AACGAGGCGCACCATATCCC-NH2-3'	1051-48-01	1878
	invader	5'-CCAGCGTTTCATTGGCAAAGATCAA-3'	971-01-03	1879
	stacker	5'-CGGAAGAATGGGTCGACCATG-3'	971-01-04	1880
	arrestor SET 1	5'-GGGATATGGTGGTGC-3'	1051-48-02	1881
	probe	5'-CCGTCACGCCTCCACCATATCCC-HEX-3'	1051-12-02	1882
	probe	5'-CCGTCACGCCTCCACCATATCCC-3'	1051-12-01	1883
	probe	5'-CCGTCACGCCTCCACCATATCCC-NH2-3'	971-01-01	1884
	invader		971-01-03	
	stacker		971-01-04	
	arrestor	5'-GGGATATGGTGGAGGCG-3'	971-01-02	1885

FIGURE 47AT

FIGURE 47A1

SET 2				
probe	5'-AACGAGGGCGCACCGAGCTGATGAG-NH2-3'	1051-48-03	1886	
invader	5'-GAGAAAGAGCTCAAACAGCTGGCGGAATAA-3'	971-01-10	1887	
stacker	5'-TGAAAAAGTCTGGTAGAACAAAGTTCAGC-3'	971-01-11	1888	
arrestor	5'-CTCATCAGCTCTGGTGCGC-3'	1051-48-04	1889	
SET 1				
probe	5'-CCGTCACGCCTCCAGAGCTGATGAG-NH2-3'	971-01-08	1890	
		971-01-10		
		971-01-11		
	5'-CTCATCAGCTCTGGAGGCG-3'	971-01-09	1891	
SET 2				
h 2B6 p450 alt.splice designs2				
p	5'-AACGAGGGCGCACCCCTTGGATTTC-NH2-3'	1051-48-05	1892	
l	5'-CTGTTCAATCTCCCTGTAGACTCTCTA-3'	1051-48-10	1893	
s	5'-CGAAGCTCCTCTATCAG-3'	1051-48-09	1894	
a	5'-GAAATCCAAGGGTGCGC-3'	1051-48-06	1895	
SET 1				
p	5'-CCGTCACGCCTCCCTTGGATTTC-NH2-3'	1051-48-07	1896	
l		1051-48-10		
s		1051-48-09		
a	5'-GAAATCCAAGGGAGGCG-3'	1051-48-08	1897	
SET 2				
p	5'-AACGAGGGCGCACTGAGGGCC-NH2-3'	1051-48-11	1898	
l	5'-GGAAGAGGAAGGTGGGTCCAA-3'	1051-48-16	1899	
s	5'-CCCTTGGATTTCGAAG-3'	1051-48-15	1900	
a	5'-GGCCCTCAGTGCGC-3'	1051-48-12	1901	
SET 1				
p	5'-CCGTCACGCCTCTGAGGGCC-NH2-3'	1051-48-13	1902	
l		1051-48-16		
s		1051-48-15		
a	5'-GGCCCTCAGAGGCG-3'	1051-48-14	1903	
SET 2				
h2B6 p450 alt. Splice designs4				

FIGURE 47AU

probe	5'-AACGAGGGCGACAATACAGAGCTG-NH2-3'	1051-48-17	1904
invader	5'-GAGAAAGAGCTCAAAACAGCTGGCCGC-3'	1051-48-22	1905
stacker	5'-ATGAGTGA AAAAGTCTGGTAGAAC-3'	1051-48-21	1906
arrestor	5'-CAGCTCTGTATTGTGCGC-3'	1051-48-18	1907
SET 1			
probe	5'-CCGTCACGCCCTCAATACAGAGCTG-NH2-3'	1051-48-19	1908
invader		1051-48-22	
stacker		1051-48-21	
arrestor	5'-CAGCTCTGTATTGAGGCG-3'	1051-48-20	1909
SET 2			
probe	5'-AACGAGGGCGCACGGTTGAGGTTCTG-NH2-3'	1051-48-23	1910
invader	5'-CAGCAAAGAGAGCGAGAGCGTGTGAC-3'	1051-48-28	1911
stacker	5'-GTGGCTGAATTCACGTGTG-3'	1051-48-27	1912
arrestor	5'-CAGAACCTCAACCGTGCGC-3'	1051-48-24	1913
SET 1			
probe	5'-CCGTCACGCCCTCGGTTGAGGTTCTG-NH2-3'	1051-48-25	1914
invader		1051-48-28	
stacker		1051-48-27	
arrestor	5'-CAGAACCTCAACCGAGGCG-3'	1051-48-26	1915
SET 2			
h2B6 p450 designs			
probe	5'-CCGTCACGCCCTCCACCATATCCCCG-NH2-3'	971-01-06	1916
invader	5'-CCGTCACGCCCTCCACCATATCCC-NH2-3'	971-01-03	1917
stacker	5'-CGGAAGAAATGGGTCGAC-3'	971-01-05	1918
stacker	5'-CGGAAGAAATGGGTCGACCATG-3'	971-01-04	1919
arrestor	5'-GGGATATGGTGGAGGCG-3'	971-01-02	1920
SET 2			
probe	5'-CCAGCGGTTTCCATTGGCAAAGATCAA-3'	971-01-01	1921
invader		971-01-03	
arrestor	5'-CGGGGATATGGTGGAGGCG-3'	971-01-07	1922
SET 2			
probe	5'-CCGTCACGCCCTCCAGAGCTGATGAG-NH2-3'	971-01-08	1923
invader	5'-GAGAAAGAGCTCAAAACAGCTGGCCGAATAA-3'	971-01-10	1924
stacker	5'-TGAAAAAGTCTGGTAGAACAAAGTTCAGC-3'	971-01-11	1925

FIGURE 47AV

arrestor SET 2	5'-CTCATCAGCTCTGGAGGGCG-3'	971-01-09	1926
h2b6p450 designs 2			
probe	5'-CCGTCACGGCCTCAGATGACTGCC-NH2-3'	971-01-12	1927
invader	5'-GGAGAAAGGTCGGAATACTCTGAATCTCATC-3'	971-01-13	1928
stacker	5'-TCTGTGTATGGCATTGCGTCGG-3'	971-01-14	1929
arrestor SET 2	5'-GGCAGTCATCTGAGGGCG-3'	971-01-15	1930
h 2C19 designs 1			
probe	5'-CCGTCACGGCCTCCATCCTTAATATCTAT-NH2-3'	971-26-01	1931
invader	5'-GAGAGATTGGTTAAGGATTTGCTGAA-3'	971-26-03	1932
stacker	5'-CTGTAGGATATTTCCAATCACTGGG-3'	971-26-04	1933
arrestor SET 2	5'-ATAGATATTAAGGATGGAGGGCG-3'	971-26-02	1934
probe	5'-AACGAGGGCGCACCGTTCCAGGC-NH2-3'	971-26-05	1935
invader	5'-CATATCCATGCAGCACCAACCATGA-3'	971-26-07	1936
stacker	5'-CAAAATACAGAGTGAACACAGGGGCC-3'	971-26-08	1937
arrestor SET 1	5'-GCCTGGAACGGTGCGC-3'	971-26-06	1938
h2C19 shorter site 2 designs			
probe	5'-AACGAGGGCGCACCGTTCCAGG-NH2-3'	971-68-01	1939
invader	5'-CATATCCATGCAGCACCAACCATGA-3'	971-26-07	1940
stacker	5'-CCAAAATACAGAGTGAACACAGGGGCC-3'	971-68-03	1941
arrestor SET 1	5'-CCTGGAACGGTGCGC-3'	971-68-02	1942
probe	5'-AACGAGGGCGCACCGTTCCAGGC-NH2-3'	971-26-05	1943
probe	5'-AACGAGGGCGCACCGTTCCAGGC-3'	1051-12-03	1944
probe	5'-AACGAGGGCGCACCGTTCCAGGC-HEX-3'	1051-12-04	1945
invader	5'-CAAAATACAGAGTGAACACAGGGGCC-3'	971-26-07	1946
stacker	5'-GCCTGGAACGGTGCGC-3'	971-68-04	1947
arrestor SET 1		971-26-05	
rat 1A1, rat 1A2 probe	Rat 1A1 site 1 bs. 639-700 5'-CCGTCACGGCCTCAGATTGACTATGCTG-NH2-3'	500-58-01	1948

FIGURE 47AW

invader stacker arrestor SET 2	5'-CAGTAACCTCCCAAACTCATTGCTTC-3' 5'-AGCAGCTCTTGGTCATCGT-3' 5'-CAGCATAGTCAATCTGAGGCG-3'	500-58-03 500-58-04 500-58-02	1949 1950 1951
rat 1A2 probe invader stacker arrestor SET 1	Rat 1A2 site 1 bs. 674-725 5'-AACGAGGCGCACTGACATTCTCCAC-NH2-3' 5'-GTCCACAGCATTCCCTGAGGA-3' 5'-AAAGTCCTTGCTGCTCTTC-3' 5'-GTGGAGAAATGTCAGTGCGC-3'	500-58-05 500-58-07 500-58-08 500-53-06	1952 1953 1954 1955
rat 2B1-2B2 patent probe invader stacker arrestor SET 1	5'-AACGAGGCGCACTGGCTTGACACA-NH2-3' 5'-GTCAATGTCCTTGGGAGCCAAA-3' 5'-GAGAAGTTCTGGAGGATGGTGG-3' 5'-TGTGTCAAGCCAGTGCGC-3'	500-49-05 500-49-03 r2B1, 2B2 500-49-07 500-49-06	1956 1957 1958 1959
probe invader stacker arrestor SET 1	5'-AACGAGGCGCACTGGCTTGACACAG-NH2-3' 5'-AGAAAGTTCTGGAGGATGGTGG-3' 5'-CTGTGTCAAGCCAGTGCGC-3'	500-49-01 500-49-03 r2B1, 2B2 500-49-04 500-49-02	1960 1961 1962
rat 2B1-2B2 site 4 probe invader stacker arrestor SET 2	PROBE SET 2 (r2B1 bs 1299-1353, r2B2 bs. 474-528) 5'-AACGAGGCGCACGAGGAACAATTCATTT-NH2-3' 5'-GTTCTGGAGGATGGTGTGAAGAAC-3' 5'-CGGGCAATGCCCTTCG-3' 5'-AAATGAATTGTTCTCGTGCGC-3'	500-49-12 500-49-10 500-49-14 500-49-13	1963 1964 1965 1966
probe invader stacker arrestor SET 1	5'-AACGAGGCGCACGAGGAACAATTCATTC-NH2-3' 5'-GGGCAATGCCCTTCG-3' 5'-GAAATGAATTGTTCTCGTGCGC-3'	500-49-08 500-49-10 500-49-11 500-49-09	1967 1968 1969
rat 2B1-2B2 ,5 patent probe	5'-AACGAGGCGCACAGCTGAGAAGCAG-NH2-3'	500-49-15	1970

FIGURE 47AX

invader	5'-GCCTCAGCCGGATCACCGC-3'	r2B1, 500-49-17	1971
invader	5'-GCCTCAGCCCGATCACCGC-3'	r2B2, 500-49-18	1972
stacker	5'-ATCTGGTACGTTGGAGGTATT-3'	r2B1 500-49-20	1973
stacker	5'-ATCTGGTATGTTGGAGGTATT-3'	r2B2 500-49-21	1974
arrestor	5'-CTGCTTCTCAGCTCTGCCG-3'	500-49-16	1975
NOTE: all 3 invader/probe sets are designed to detect both 2B1 and 2B2			
SET 1			
rat 2E1 p450 (af061442) 500-73	Rat 2E1 PROBE SET (570C)		
p	5'-CCGTCACGCCTCGTCGAAACGTTTGTT-NH2	500-40-04	1976
i	5'-CCTCAGACACTTCTTGTCATTGTAC-3'	500-40-02	1977
s	5'-GAAGAGGATATCCGCAATGACATTGC-3'	500-40-05	1978
a	5'-AACAAACGTTTCGACGAGGCG-3'	500-40-06	1979
SET 2			
p	5'-CCGTCACGCCTCGTCGAAACGTTTGTTGAAG-NH2-3'	500-40-01	1980
i		500-40-02	
s		500-40-05	
a	5'-CTTCAACAACGTTTCGACGAGGCG-3'	500-40-03	1981
SET 2			
rat 2E1 p450 (af061442) 500-73	Rat 2E1 PROBE SET (822G) (designed over splice junction #5)		
p	5'-CCGTCACGCCTCCTCCATCTCTATG-NH2-3'	500-40-10	1982
i	5'-GTTCTTGGCTGTGTTTTCCTTA-3'	500-40-08	1983
s	5'-AGGAGACAGTCAGTCACATC-3'	500-40-11	1984
a	5'-CATAGAGATGGAGGAGGCG-3'	500-40-12	1985
SET 2			
p	5'-CCGTCACGCCTCCTCCATCTCTATGAG-NH2-3'	500-40-07	1986
i		500-40-08	
s		500-40-11	
a	5'-CTCATAGAGATGGAGGAGGCG-3'	500-40-09	1987
SET 2			
rat 2E1 PROBE SET (969G)	Designed over splice junction #6		
probe	5'-CCGTCACGCCTCCTCTTCAATTTCTG-HEX-3'	1073-19-06	1988
invader	5'-CCCTGTCAATTTCTTCATGAAGTTTA-3'	500-40-14	1989
stacker	5'-GGTATTTTCATGAGGATCAGGAGC-3'	500-40-17	1990
arrestor	5'-CCAGAAATTGAAGAGGAGGCG-3'	500-40-15	1991
SET 2			

FIGURE 47AY

probe	5'-CCGTCACGCCCTCCTCTTCAATTTCTG-3'	1073-19-05	1992
probe	5'-CCGTCACGCCCTCCTCTTCAATTTCTG-NH2-3'	500-40-16	1993
invader	5'-CCGTCACGCCCTCCTCTTCAATTTCTG-NH2	500-40-13	1994
stacker		500-40-14	
arrestor		500-40-17	
SET 2	5'-CAGAAATTGAAGAGGAGGCG-3'	500-40-18	1995
Rat 2E1 PROBE SET (969G)	Designed over splice junction #6		
probe	5'-CCGTCACGCCCTCCTCTTCAATTTCT-NH2-3'	500-73-01	1996
invader	5'-CCCTGTCAATTTCTTCATGAAGTTTA-3'	500-40-14	1997
stacker	5'-GGGTATTTTCATGAGGATCAGGAG-3'	500-73-03	1998
arrestor	5'-AGAAATTGAAGAGGAGGCG-3'	500-73-02	1999
SET 2			
rat 3A's design 2			
probe	5'-CCGTCACGCCCTCGTTCTGGGT-NH2-3'	500-43-15	2000
invader	5'-GAGCAAAACCTCATGCCAATGCAC-3'	r3A1, 3A18 500-43-23	2001
invader	5'-GAGCAAAACCTCATGTCAATGCAC-3'	r3A2 500-43-24	2002
invader	5'-GAGCAAAACCTCATGCCAATACAC-3'	r3A2 500-43-24	2003
stacker	5'-CCATTTCCAAAGGGCAG-3'	short r3A1, 3A2, 3A18 500-43-19	2004
stacker	5'-CCATTTCCCAAGGGCAG-3'	short r3A9 500-43-20	2005
arrestor	5'-ACCCAGGAACGAGGCG-3'	500-43-16	2006
SET 2			
probe	5'-CCGTCACGCCCTCGTTCTGGGT-NH2-3'	500-43-13	2007
invader		r3A1, 3A18 500-43-23	
invader		r3A2 500-43-24	
arrestor	5'-GACCCAGGAACGAGGCG-3'	500-43-14	2008
SET 2			
rat 3A's desing 3			
probe	5'-CCGTCACGCCCTCTGAGGCAAAACCT-NH2-3'	500-43-29	2009
invader	5'-AGAGCGAGTTTCATATTCAA-3'	r3A1, 3A2 500-43-35	2010
invader	5'-AGAGCAACTTTCATGTTCAA-3'	r3A9 500-43-36	2011
invader	5'-ACAGCAAGTTTCATGCTGAA-3'	r3A18 500-43-37	2012
stacker	5'-CATGCCAATGCAGTTCCTG-3'	r3A1, 3A18 500-43-31	2013
stacker	5'-CATGTCAATGCAGTTCCTG-3'	r3A2 500-43-32	2014
stacker	5'-CATGCCAATACAGTTCCTG-3'	r3A9 500-43-33	2015

FIGURE 47AZ

arrestor SET 2	5'-AGGTTTGCTCTCCGAGGCG-3'	500-43-30	2016
probe	5'-CCGTCACGCCTCTGAGAGCAACCTCA-NH2-3'	500-43-27	2017
invader		r3A1, 3A2 500-43-35	
invader		r3A9 500-43-36	
invader		r3A18 500-43-37	
arrestor SET 2	5'-TGAGGTTTGCTCTCAGAGGCG-3'	500-43-28	2018
rat 3A's designs			
probe	5'-CCGTCACGCCTCGGAACATCTCCT-NH2-3'	500-43-03	2019
invader	5'-TGCTCCATACTGTTCAATGATGGC-3'	r3A1, 3A2 500-43-09	2020
invader	5'-TATCTGTATACTGGTTAATGATGGC-3'	r3A9 500-43-10	2021
invader	5'-TATCTCCATACTGTCTCATGAGGGC-3'	r3A18 500-43-11	2022
s	5'-TGAGTCTTCCACTGGTG-3'	r3A1, 3A2 500-43-05	2023
s	5'-TGAGCTTCCCACCTGGTG-3'	r3A9 500-43-06	2024
a	5'-TGAGTTTGCCACTGGTG-3'	r3A18 500-43-07	2025
SET 2			
probe	5'-CCGTCACGCCTCGGAACATCTCCTTGA-NH2-3'	500-43-01	2026
invader		r3A1, 3A2 500-43-09	
invader		r3A9 500-43-10	
invader		r3A18 500-43-11	
arrestor SET 2	5'-TCAAGGAGATGTTCCGAGGCG-3'	500-43-02	2027
rat 3A's design 2b			
probe	5'-CCGTCACGCCTCGTTCTCTGGG-NH2-3'	991-39-01	2028
invader	5'-GAGCAAAACCTCATGCCAATGCAC-3'	r3A1, 3A18 500-43-23	2029
invader	5'-GAGCAAAACCTCATGTCAATGCAC-3'	r3A2 500-43-24	2030
invader	5'-GAGCAAAACCTCATGCCAATACAC-3'	r3A9 500-43-25	2031
stacker	5'-TCCATTCCAAAGGGCAG-3'	r3A1, 3A2, 3A18 991-39-03	2032
stacker	5'-TCCATTCCCAAGGGCAG-3'	r3A9 991-39-04	2033
arrestor SET 2	5'-CCCAGGAACGAGGCG-3'	991-39-02	2034
rat or human 1A1 shorter site 2			
probe	5'-CCGTCACGCCTCCTGTCTGTGAT-HEX-3'	1073-19-02	2035
probe	5'-CCGTCACGCCTCCTGTCTGTGAT-3'	1073-19-01	2036

FIGURE 47BA

probe	5'-CCGTCACGCCCTCCTGTCTGTGAT-NH2-3'	991-12-04	2037
invader	5'-TCCTGACAATGCTCAATGAGGA-3'	r 1A1 500-53-11	2038
invader	5'-TCCTGACAGTGCTCAATCAGGA-3'	h 1A1 500-53-12	2039
stacker	5'-GTCCCGGATGTGGCCC-3'	rat/human 1A1 991-12-06	2040
arrestor	5'-ACATCACAGACAGGAGGCG-3'	500-53-10	2041
SET 2			
probe	5'-CCGTCACGCCCTCCTGTCTGTGATG-NH2-3'	991-12-01	2042
invader		r 1A1 500-53-11	
invader		h 1A1 500-53-12	
stacker	5'-TCCCGGATGTGGCCCT-3'	rat/human 1A1 991-12-03	2043
arrestor	5'-CATCACAGACAGGAGGCG-3'	991-12-02	2044
SET 2			
probe	5'-CCGTCACGCCCTCCTGTCTGTGATG-NH2-3'	500-53-09	2045
invader		r 1A1 500-53-11	
invader		h 1A1 500-53-12	
stacker	5'-GTCCCGGATGTGGCCC-3'	rat/human 1A1 991-12-06	2046
arrestor	5'-ATCACAGACAGGAGGCG-3'	991-12-05	2047
SET 2			
rat or human 1A1 site 1			
probe	5'-CCGTCACGCCCTCTGGCCCTTC-NH2-3'	500-53-04	2048
invader	5'-CTGTCTGTGATGTCCCGGATGA-3'	500-53-03	2049
stacker	5'-TCAAATGTCTGTAGTGCTC-3'	rat 1A1 500-53-06	2050
stacker	5'-TCAAAGGTTTGTAGTGCTC-3'	human 1A1 500-53-07	2051
arrestor	5'-GAAGGGCCAGAGGCG-3'	500-53-05	2052
SET 2			
probe	5'-CCGTCACGCCCTCTGGCCCTTCTC-NH2-3'	500-53-01	2053
invader		500-53-03	
arrestor	5'-GAGAAAGGGCCAGAGGCG-3'	500-53-02	2054
SET 2			
Rat/Human 1A1 site 2			
probe	5'-CCGTCACGCCCTCCTGTCTGTGATG-NH2-3'	500-53-09	2055
invader	5'-TCCTGACAATGCTCAATGAGGA-3'	r 1A1 500-53-11	2056
invader	5'-TCCTGACAGTGCTCAATCAGGA-3'	h 1A1 500-53-12	2057
stacker	5'-CCCGGATGTGGCCCT-3'	rat/human 1A1 500-53-14	2058
arrestor	5'-ACATCACAGACAGGAGGCG-3'	500-53-10	2059

FIGURE 47BB

SET 2				
rat or human 1A2 sites				
probe	5'-AACGAGGCGCACGGACTGTTTTCTGC-HEX-3'	1073-19-04	2060	
probe	5'-AACGAGGCGCACGGACTGTTTTCTGC-3'	1073-19-03	2061	
probe	5'-AACGAGGCGCACGGACTGTTTTCTGC-NH2-3'	500-53-15	2062	
invader	5'-CTTGTTGAAGTCTTGATAGTGTTCCTC-3'	rat 1A2 500-53-17	2063	
invader	5'-CTTGTCAAAAGTCCTGATAGTGTTCCTC-3'	human 1A2 500-53-18	2064	
arrestor	5'-GCAGAAAAACAGTCCGTGCGC-3'	500-53-16	2065	
SET 1				
shorter h2C19 design site 3				
probe	5'-AACGAGGCGCACGATGTCCATCG-NH2-3'	971-48-01	2066	
invader	5'-GCAATCAATAAAGTCCCGAGGGTTGTTTC-3'	971-26-11	2067	
stacker	5'-ATTCTTGGTGTCTTTTACTTTCTC-3'	971-48-03	2068	
arrestor	5'-CGATGGACATCGTGCGC-3'	971-48-02	2069	
SET 1				

FIGURE 47BC

Human IL-10

Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	SEQ ID NO
probe	aacgaggcgacacaactcactcagct-NH2	511-31-01	FV-1 & FV-2	3' amine	2070
arrestor	apccatgagtggttggtgcg	511-31-02		All 2'-Ome + 3' amine arrestor for 511-31-01	2071
probe	aacgaggcgacacaactcactcagct-NH2	511-30-01	FV-1 & FV-2	3' amine	2072
arrestor	gccatgagtggttggtgcg	511-30-02		All 2'-Ome + 3' amine arrestor for 511-30-01	2073
arrestor	gccatgagtggttggtgcg	380-89-02		All 2'-Ome Same as 380-82-02	2074
arrestor	gccatgagtggttggtgcg	380-89-04		All 2'-Ome Same as 380-82-04	2075
arrestor	gccatgagtggttggtgcg	380-89-06		All 2'-Ome Same as 380-82-06	2076
arrestor	gccatgagtggttggtgcg	380-89-08		All 2'-Ome Same as 380-82-08	2077
probe	aacgaggcgacacaactcactcagct-NH2	511-67-01	FV-1 & FV-2	3' amine	2078
stacker	ctttgacatgcctctcttgagc	781-79-01		stacker for 511-67-01 All 2'Ome	2079
arrestor	ccatgagtggttggtgcg	781-79-02		all 2'Ome arrestor for 511-67-01	2080
probe	aacgaggcgacacaactcactcagct-NH2	781-80-01	FV-1 & FV-2	3' amine	2081
stacker	gctttgacatgcctctcttgag	781-80-02		stacker for 781-80-01 All 2'Ome	2082
arrestor	calgagtggttggtgcg	781-80-03		all 2'Ome arrestor for 781-80-01	2083
probe	aacgaggcgacacaactcactcact-NH2	781-81-01	FV-1 & FV-2	3' amine	2084
stacker	ggctttgacatgcctctcttgcga	781-81-02		stacker for 781-81-01 All 2'Ome	2085
stacker	ggctttgacatgcctctcttgcga	938-74-01		stacker for 781-81-01 All 2'Ome to replace 781-81-02	2086
arrestor	atgagtggttggtgcg	781-81-03		all 2'Ome arrestor for 781-81-01	2087
probe	cggcagcgctccaaactcactcact-NH2	938-46-02	MO4-1/MO4-2/MO4-3	same as 938-46-01 w/ 3' amine	2088
arrestor	atgagtggttggtgcg	938-46-03		all 2'Ome arrestor for 938-46-01&02	2089
invader	tagctctcagtgagtgagagtgta	380-59-02			2090
invader	gtcagtgagctctcagtgagtgagagtgta	511-32-01		longer invader 380-59-02	2091

Mouse IL-4

Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	
probe	aacgaggcgacactctctcttgagctgcg	511-14-01	FV-1 & FV-2		2092
arrestor	cgaggcacaggagagtgcg	511-14-02		All 2'-Ome + 3' amine arrestor for 511-14-01	2093
probe	aacgaggcgacactctctcttgagct-NH2	511-12-01	FV-1 & FV-2	458-34-01 with 3' amine	2094
arrestor	aggcacaggagagtgcg	511-02-01	MO2	All 2'-Ome + 3' amine arrestor for 458-34-01	2095
probe	cgctacgctctctctcttgagct-NH2	511-16-01		3' amine	2096
arrestor	aggcacaggagagagagc	511-16-02		All 2'-Ome + 3' amine arrestor for 511-16-01	2097
arrestor	aggcacaggagagagagc	511-50-01		All 2'-Ome + 3' amine arrestor for 511-16-01	2098
probe	aaccagtcgactctcttgagct	458-35-01	MISC-1		2099
arrestor	aggcacaggagagagc	511-03-01		All 2'-Ome + 3' amine arrestor for 458-35-01	2100
probe	ccagtcgactctctcttgagct	458-35-02	MISC-1		2101
arrestor	aggcacaggagagtgcg	511-04-01		All 2'-Ome + 3' amine arrestor for 458-36-01	2102
probe	aaccacgcgacactctcttgagct	458-36-01	MISC-2		2103
probe	aacgaggcgacactctcttgagc	511-13-01	FV-1 & FV-2		2104
arrestor	ggcacaggagagtgcg	511-13-02			2105
probe	aacgaggcgacactctcttgag-NH2	781-71-01	FV-1 & FV-2	3' amine	2106
stacker	ctcgtgttcaaaagccagtgactctc	781-71-02		All 2'-Ome for 781-71-01	2107
arrestor	tcacaggagagtggc	781-71-03		All 2'-Ome arrestor for 781-71-01	2108
invader	atccatctctcgtcagtggtgcctcta	380-32-01		Same as 380-32-01 but underlined base is mismatch to sequence	2109
invader	atccatctctcgtcagtggtgcctcta	380-32-02			2110
probe	aacgaggcgacacctctctcttgagc-NH2	511-44-01	FV-1 & FV-2	3' amine	2111
arrestor	gtcacaggagaggggtgcg	511-44-02		All 2'-Ome + 3' amine arrestor for 511-44-01	2112
probe	aacgaggcgacacctctctcttg-NH2	511-68-01	FV-1 & FV-2	3' amine	2113
arrestor	acaggagaggggtgcg	511-68-02		All 2'-Ome + 3' amine arrestor for 511-68-01	2114
invader	ggcacatccatctcgtcagtgagtgta	511-45-01			2115
probe	cggtcagcgctctctctcttgagct-NH2	511-46-01	MO4-1/MO4-2/MO4-3	3' amine	2116

FIGURE 47BD

arrestor	acgaggtcacaggaggagc	511-46-02	MO4-1/MO4-2/MO4-3	All 2'-Ome + 3' amine arrestor for 511-46-01	2117
probe	cggtaacgcctctctctgtaacctc-NH2	511-69-01		3' amine	2118
arrestor	gaggtcacaggaggagc	511-69-02	MO4-1/MO4-2/MO4-3	All 2'-Ome + 3' amine arrestor for 511-69-01	2119
probe	cggtaacgcctctctctgtaacctc-NH2	781-88-01		3' amine	2120
stacker	loggttcaaaatgcgatgactctctca	781-88-02		All 2'Ome stacker for 781-88-01	2121
arrestor	gggtcacaggaggaggcg	781-88-03	MO4-1/MO4-2/MO4-3	All 2'-Ome arrestor for 781-68-01	2122
probe	cggtaacgcctctctctgtaacctc-NH2	781-69-01		3' amine	2123
stacker	ctcggttcaaaatgcgatgactctctca	781-69-02		All 2'Ome stacker for 781-69-01	2124
arrestor	gtcacaggaggaggcg	781-89-01		All 2'-Ome arrestor for 781-69-01	2125
invader	acatccatctctcgtgcatggcgctctca	511-47-01			2126
probe	cagtaacgctctctctctctctc-NH2	511-17-01	MO2	3' amine	2127
arrestor	aggagaaggagagagcg	511-17-02		All 2'-Ome + 3' amine arrestor for 511-17-01	2128
invader	gcacatccatctctcgtgcatggcgga	511-18-01			2129
probe	cgcgcgagatcaactctctgtaacctc-NH2	781-83-01	TT-1/TT-2	3' amine	2130
arrestor	gggtcacaggaggagtc	781-83-02		All 2' Ome arrestor for 781-83-01	2131
probe	cggtaacgcctctctctgtaacctc-NH2	781-82-01	MO4-1/MO4-2/MO4-3	3' amine	2132
invader	cgcgcgctctctctctctctca	781-82-02			2133
arrestor	gggtcacaggaggaggcg	781-82-03		All 2' Ome arrestor for 781-82-01	2134
probe	cggtaacgcctctctctgtaacctc-NH2	781-84-01	MO4-1/MO4-2/MO4-3	3' amine	2135
invader	gtgtcatggcgctctctca	781-84-02			2136
arrestor	gggtcacaggaggaggcg	781-84-03		All 2' Ome arrestor for 781-84-01	2137
Mouse IL-2					
Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	
probe	cagtaacgcctctctctgtaacctc-NH2	511-19-01	MO2	3' amine	2138
arrestor	aggtaacgcctctctctgtaacctc-NH2	511-19-02		All 2'-Ome + 3' amine arrestor for 511-19-01	2139
invader	gcactcaaa(gtgttg)Cagagccca	511-20-01			2140
Mouse IFN-γ					
Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	
probe	cagtaacgctctctctctgttcaggttc-NH2	511-24-01	MO2	3' amine	2141
arrestor	ggaaatggcaaaaaggagagcg	511-24-02		All 2'-Ome + 3' amine arrestor for 511-24-01	2142
probe	cagtaacgctctctctgttcaggttc-NH2	511-23-01	MO2	3' amine	2143
arrestor	gaactggcaaaaaggagagcg	511-23-02		All 2'-Ome + 3' amine arrestor for 511-23-01	2144
probe	cagtaacgctctctctgttcaggttc-NH2	511-21-01	MO2	3' amine	2145
arrestor	aactggcaaaaaggagagcg	511-21-02		All 2'-Ome + 3' amine arrestor for 511-20-01	2146
invader	gtctgcaggattttcatgtaacca	511-22-01			2147
Human TNF-α					
Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	
probe	cgcgcgagatcaactctgactgcctg-NH2	511-77-01	TT-1/TT-2	3' amine (based on 685-27-01-1 base shorter)	2148
arrestor	caggagatcagatgactcgg	511-77-02		All 2'-Ome + 3' amine arrestor for 511-77-01	2149
probe	cgcgcgagatcaactctgactgcctc-NH2	511-78-01	TT-1/TT-2	3' amine (based on 685-27-01-2 bases shorter)	2150
arrestor	aggcagtcagatgactcgg	511-78-02		All 2'-Ome + 3' amine arrestor for 511-78-01	2151
invader	ctt gtc act cgg ggt tgg aga aga tga a	685-28-01			2152
Human IL-1β					
Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	
probe	gcgcgcgcctctctctctgtttaggcc-NH2	511-79-01	MO4-1/MO4-2/MO4-3	3' amine (based on 685-21-01)	2153

FIGURE 47BE

arrestor	ggccctaaacagatgagagggt	511-80-01	All 2'-Ome + 3' amine arrestor for 511-79-01	2154
arrestor	ggccctaaacagatgagagggtga	511-80-02	All 2'-Ome + 3' amine arrestor for 511-79-01	2155
invader	caggctctggaaggagcacta	685-23-01		2156
Human IL-6				
Sequence				
Oligo Type	gcgcctcagcgcctctctctcattgaatcc-NH2	Oligo Number	Secondary Cassette	Comments
probe	aggatccaatgagagagagcggtga	511-81-01	MO4-1/MO4-2/MO4-3	3' amine (based on 685-16-01)
arrestor	aggatccaatgagagagagcggt	511-82-01		All 2'-Ome + 3' amine arrestor for 511-81-01
arrestor	aggatccaatgagagagagcggt	511-82-02		All 2'-Ome + 3' amine arrestor for 511-81-01
probe	cggcaagcgcctctctctcattgaatcc-NH2	781-27-01	MO4-1/MO4-2/MO4-3	3' amine (511-81-01 with new arm)
arrestor	aggatccaatgagagagagcggt	781-27-02		All 2'-Ome + 3' amine arrestor for 781-27-01
probe	gcgcctcagcgcctctctcattgaatcc-NH2	511-83-01	MO4-1/MO4-2/MO4-3	3' amine (based on 685-16-01)
arrestor	ggatccaatgagagagagcggtga	511-84-01		All 2'-Ome + 3' amine arrestor for 511-81-01
arrestor	ggatccaatgagagagagcggt	511-84-02		All 2'-Ome + 3' amine arrestor for 511-81-01
probe	cggcaagcgcctctctctcattgaatcc-NH2	781-28-01	MO4-1/MO4-2/MO4-3	3' amine (511-83-01 with new arm)
arrestor	ggatccaatgagagagagcggt	781-28-02		All 2'-Ome + 3' amine arrestor for 781-28-01
probe	cggcaagcgcctctctcattgaatcc-NH2	781-29-01	MO4-1/MO4-2/MO4-3	3' amine (1 base shorter than 781-28-01)
arrestor	ggatccaatgagagagagcggt	781-29-02		All 2'-Ome + 3' amine arrestor for 781-29-01
probe	cggcaagcgcctctctcattgaatcc-NH2	781-30-01	TT-1/TT-2	3' amine (781-29-01 with new arm)
arrestor	ggatccaatgagagagagcggt	781-30-02		All 2'-Ome + 3' amine arrestor for 781-30-01
invader	cca aaa gtc cag tga tta tta cca ggc aag a	685-18-01		
Secondary Cassettes				
SRT	cggagaagcagttgtgtgcgcctgattaaNH2	277-68-05	FV-1	2172
FRET probe	Fcaac(Cy3)gctctctcg	187-46-01		2173
SRT	ccaggagaacaggtgtgtgcgcctgttt	685-23-01	FV-2	2174
FRET probe	Fcaac(Z21)gctctgtgg	787-29-02		2175
SRT	cggagaagcagttgtgtgcgcctgagcgtNH2	641-60-03	MO4-1	2176
FRET probe	Fcaac(Cy3)gctctctcg	187-46-01		2177
SRT	cggagaagcagttgtgtgcgcctgagcgtNH2	562-93-01	MO4-2	2178
FRET probe	Fcaac(Cy3)gctctctcg	187-46-01		2179
SRT	ccaggagaacaggtgtgtgcgcctgagcgt	685-23-02	MO4-3	2180
FRET probe	Fcaac(Z21)gctctgtgg	767-29-02		2181
SRT	cggagaagcagttgtgtgctcctcagcgtNH2	562-92-01	TT-1	2182
FRET probe	Fcaac(Cy3)gctctctcg	187-46-01		2183
SRT	cggagaagcagttgtgtgctcctcagcgtNH2	685-56-01	TT-2	2184
FRET probe	Fcaac(Cy3)gctctctcg	187-46-01		2185
SRT	gctactgagatgaaggagacgtgactgtianNH2	491-68-02	MO2	2186
FRET probe	Fcttc(Cy3)ctcagtcgc	491-68-01		2187
SRT	cag agg aag cgg ttg cgt aag act ggtLaa-NH2	458-35-03	MISC-1	2188
FRET probe	Fcaac(Cy3)gctctctcg	187-46-01		2189
SRT	cgg agg aag cgg ttg gtg cgg gtg gtt ggt-PO3	441-31-02	MISC-2	2190
FRET probe	Fcaac(Cy3)gctctctcg	187-46-01		2191

FIGURE 47BF

Oligo sequence descriptions: 5' to 3' direction, 2'-Ome ntts are bolded and underlined, internal modifications defined in ()

FRET Oligo/SRT Combinations

Set	FRET Oligo	SRT
Set 1	187-46-01	641-60-02
Set 2	187-46-01	690-82-03
Set 3	307-70-02	339-50-03
Set 4	303-18-05	343-63-07
Set 5	303-18-05	343-25-01
Set 6	187-46-01	649-10-01
Set 7	744-80-03	277-068-05N
Set 8	187-46-01	833-18-07
Set 9	767-28-03	777-71-10
Set 10	767-29-02	996-29-01
Set 11	1067-20-01	996-29-01
Set 12	307-70-02	307-70-04
Set 13	491-01-01	491-02-04
Set 14	187-46-01	562-84-01

Oligo #	Oligo Sequence
187-46-01	Fam-CAAC(CY3)GCTTCCTCCG
307-70-02	Fam-ATT(CY3)TCTCAGAC-NH2
303-18-05	Fam-TAAC(CY3)GCTTCCTCCG
744-80-03	Fam-CAA(Dabcyl)TGCTTCCTCCG
767-28-03	Red Dye-CTC(Z-21)TCTCAGTCGG
767-29-02	Fam-CAC(Z-21)TGCTTCGTGG
1067-20-01	Fam-CAC(Z-28)TGCTTCGTGG
491-01-01	Fam-CTTC(CY3)TCTCAGAC

SEQ ID NO
2192
2193
2194
2195
2196
2197
2198
2199

Oligo #	Oligo Sequence
641-60-02	CGGAGGAAGCAGTTGGAGGCGTGACGGT-NH2
690-82-03	CGGAGGAAGCAGTTGGCGGTGACGGTT
339-50-03	CAGTCTGAGATGAATGAGACGAGAGGT-NH2
343-63-07	CGGAGGAAGCGTTAGTCTGTACCGTCAI-NH2
343-25-01	CGGAGGAAGCGTTAGTCTGCCACGTCAI-NH2
649-10-01	CGGAAGACGAGTTGGTGGCCCTCGTAA-NH2
277-068-05N	CGGAGGAAGCAGTTGGTGGCCCTCGTAA-NH2
833-18-07	CGGAGGAAGCAGTTGGCGGTGCGGT-NH2
777-71-10	CGCAGTGAGAAATGAGAGCGGTGACGGU-NH2
996-29-01	CCAGGAAGCAAGTGGTGGCCCTCGUUU
307-70-04	CAGTCTGAGATGAATGACCGCAGG-NH2
491-02-04	AGTCTGAGATGAAGGAGACGTGACTGTGG-NH2
562-84-01	CGGAGGAAGCGGTTGGTGATCTCGGCG-NH2

SEQ ID NO
2200
2201
2202
2203
2204
2205
2206
2207
2208
2209
2210
2211
2212

Oligo Type	Oligo #	Oligo Sequence	Notes	Position	SEQ ID NO
Human IL-2					
Probe	196-56-01	TCTGTGGCGTATCCTTCTTGGGCATGTAA		Splice Junction 2	2213
Probe	196-56-02	GTGGCGTATCCTTCTTGGGCATGTAA			2214
Probe	196-56-03	GGGTATCCTTCTTGGGCATGTAA			2215
Invader	128-93-02	GAGATGTTTCAGTCTGTGGG(ddC)	ddC = diideoxy C		2216
Capture Oligo	145-030-05	AAAAGATACGCCACAGAACACG(BIOTIN-3A)TT			2217
Probe	315-28-01	TGGCGTATCTTAATTCACATCAAAAT		Splice Junction 1	2218
Invader	315-28-02	TGGGAGTTTGGGATCTTGTAAATTA			2219

FIGURE 47BG

Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dTTC	Splice Junction 1	2220
Probe	315-29-01	TGGCGTATCTAAATTAATTCATTC		2221
Invader	315-29-02	ATCCTGGTGAGTTTGGGATCTTGA		2222
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dTTC	Splice Junction 1	2223
Probe	315-29-03	TGGCGTATCTTCCATTCAAAATCATC		2224
Invader	315-29-04	GTTTGGGATCTTGTAATTATTA		2225
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dTTC	Splice Junction 2	2226
Probe	315-30-01	GTGGCGTATCCTCTCTGGGCGAT		2227
Invader	315-30-02	GAAAGTGTTCAGTTCTGTGGC		2228
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dTTC		2229
Human b-actin				
Probe	315-26-01	TGGCGTATCTCTGGGTCACTCTTC	Splice Junction 3	2230
Invader	315-26-02	GGGTGTGAAGGTTCTCAACATGAA		2231
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dTTC	Splice Junction 5	2232
Probe	315-27-01	TGGCGTATCTCTGATCTCTCATTTGT		2233
Invader	315-27-02	ACTTGGCGTCAAGGAGGAGCAATGAA		2234
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dTTC	Splice Junction 3	2235
Probe	315-91-01	TGGCGTATCTGATCTGGGTCACTCT		2236
Invader	315-91-02	TGGCTGGGGTGTGAAGGTCTCAACAA		2237
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dTTC	Splice Junction 4	2238
Probe	315-92-01	ACCCGTATCTGCCACAGGAAGGA		2239
Invader	315-92-02	AGTTTCGTGGATGCCACAGAGAGCCAA		2240
Invader	315-92-03	AGTTTCGTGGATGCTACAGGAGACCAA		2241
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dTTC	Splice Junction 3	2242
Probe	340-32-01	TGGCGTATCTCTCAACATGATCT		2243
Invader	340-32-02	ACGTACATGGCTGGGGTGTGAAGGA		2244
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dTTC	Splice Junction 3	2245
Probe	340-33-01	TGGCGTATCTGATCTGGGTCACTC		2246
Invader	340-33-02	TGGCTGGGGTGTGAAGGTCTCAACAA		2247
Capture Oligo	195-023-01	AAAAGATACGCCACAGC(BIOTIN-dTTC	Splice Junction 3	2248
Probe	740-01-01	CCGTACAGCCTCGCCTTGGGGTTC		2249
Invader	740-01-02	TCTGGGTCACTCTCTCGGGGTTGA		2250
Arrestor	740-01-03	GAAAGATGACCCCATGGCGG		2251
Secondary Cassette		Set 1		
Probe	740-01-08	CCGTACAGCCTCGGTCATCTTCT	Splice Junction 3	2252
Stacker	740-01-04	CGCGGTTGGCCTTGGGGTT		2253
Invader	740-01-06	CTGGGGTGTGAAGGTCTCAACATGATCC		2254
Arrestor	740-01-09	AGAAGATGACCCCATGGCGG		2255
Secondary Cassette		Set 2		
Mouse GAPDH				
Probe	425-59-01	FI-CTCTCTCGTCTCTCTCTGGAAGA	Splice Junction 4	2256
Invader	425-59-02	ATTGATGTTAGTGGGGTCTCGCA		2257
Probe	425-60-01	FI-CTCTCTCGTCTCTCTGCTGACAATC	Splice Junction 6	2258
Invader	425-60-02	GCAAGTTGGTGGTGCAGGATGCATA		2259
Probe	425-61-01	FI-CTCTCTCGTCTCTACAGGAAATG	Splice Junction 8	2260
Invader	425-61-02	GCTGAGCCGATTTCATTGTCAA		2261
Probe	425-60-01	FI-CTCTCTCGTCTCTCTCTGGAAG	Splice Junction 4	2262
Invader	425-60-02	CATTGATGTTAGTGGGGTCTCGA		2263
Probe	425-67-01	CTCTCTCTCTCTCTCTCTGGAAGA	Splice Junction 4	2264
Invader	425-59-02	ATTGATGTTAGTGGGGTCTCGCA		2265
Arrestor	425-67-04	ICTTCCAGGAGAGACG		2266
Secondary Cassette		Set 3		
Probe	425-67-02	CTCTCTCTCTCTCTCTCTCTGGAAG	Splice Junction 4	2267
Invader	425-60-02	CATTGATGTTAGTGGGGTCTCGCA		2268
		FI = Fluorescien		
		FI = Fluorescien		
		FI = Fluorescien		
		Same as 425-59-01 without Fluorescien		
		Same as 425-60-01 without Fluorescien		

FIGURE 47BH

Arrestor	425-87-05	CTTCCAGGAGGAGACG				2269
Secondary Cassette		Set 3				
Probe	425-87-03	CTCTCTGTCCTCTACAGGAAATG				2270
Invader	425-61-02	GCTGTAGCCGTATTCATTGTCAA		Splice Junction 8		2271
Arrestor	425-87-06	CAITTCCTGGTAGAGACG				2272
Secondary Cassette		Set 3				
Probe	453-23-01	ATGACGTGACAGACCTCTCTGGAAGAT			Splice Junction 4	2273
Probe	453-23-03	ATGACGTGACAGACCTCTCTGGAAGATG				2274
Invader	425-80-02	CAITTTGCTGTAGTGGGCTCTCGA				2275
Arrestor	453-23-04	CAITCTCCAGGAGGCTCTGHNH2				2276
Secondary Cassette		Set 4				
Probe	453-23-02	ATGACGTGGCAGACCTCTCTGGAAGAT				2277
Invader	425-80-02	CAITTTGCTGTAGTGGGCTCTCGA		Splice Junction 4		2278
Arrestor	453-23-05	ATCTCCAGGAGGCTCTGC-NH2				2279
Secondary Cassette		Set 5				
Probe	435-87-04	CAGTCACGTCTCTCAGGTTTTG				2280
Invader	395-05-07	AGGCAGCTCTCAGGTCAGGTGTGA				2281
FRET Probe - Secondary Reaction	524-51-01	FLCTTC(Cy3)TCTCAGTAGCG				2282
Secondary Reaction Template	524-51-03	CGCTACTGAGATGAAGGAGACGTGACTGTA-NH2				2283
Secondary Reaction Template	524-51-04	CGCTAATGAGATGAAGGAGACGTGACTGTA-NH2				2284
Probe	435-67-04	CAGTCACGTCTCTCAGGTTTTG				2285
Invader	395-05-07	AGGCAGCTCTCAGGTCAGGTGTGA				2286
FRET Probe - Secondary Reaction	524-51-02	FLCTTC(Cy3)TCTCAGTAGCGA				2287
Secondary Reaction Template	524-51-05	TCGCTACTGAGATGAAGGAGACGTGACTGTA-NH2				2288
Secondary Reaction Template	524-51-06	TCGCTAATGAGATGAAGGAGACGTGACTGTA-NH2				2289
Human Ubiquitin						
Probe	796-72-01	AACGAGGCGCACCTTTACATTTTCTATCGTATCC		119		2290
Invader	428-81-02	CGTCTTATCTCTGGATCTTTGGCA				2291
Arrestor	796-72-02	GGATACGATAGAAAATGTAAAGGTGCGC				2292
Secondary Cassette		Set 6				
Probe	796-72-03	AACGAGGCGCACCTTTACATTTTCTATCGTATC				2293
Invader	428-81-02	CGTCTTATCTCTGGATCTTTGGCA				2294
Arrestor	796-72-04	GATAGCATAGAAAATGTAAAGGTGCGC				2295
Secondary Cassette		Set 6				
Probe	820-35-01	AACGAGGCGCACCTTTACATTTTCTATCG				2296
Probe	820-35-02	AACGAGGCGCACCTTTACATTTTCTATCGT				2297
Invader	428-81-02	CGTCTTATCTCTGGATCTTTGGCA				2298
Arrestor	820-35-03	ACGATAGAAAATGTAAAGGTGCGC				2299
Secondary Cassette		Set 7				
Probe	820-88-01	AACGAGGCGCACCTTTACATTTTCTATCGT-NH2				2300
Probe	820-88-02	AACGAGGCGCACCTTTACATTTTCTATCGTU				2301
Probe	820-88-03	AACGAGGCGCACCTTTACATTTTCTATCGTG				2302
Secondary Cassette						
Probe	820-88-04	AACGAGGCGCACCTTTACATTTTCTATCGTT				2303
Invader	428-81-02	CGTCTTATCTCTGGATCTTTGGCA				2304
Arrestor	820-35-03	ACGATAGAAAATGTAAAGGTGCGC				2305
Secondary Cassette		Set 7				
Probe	847-65-01	GCGGCACGCGCGCTTTACATTTTCTATCGT				2306
Invader	428-81-02	CGTCTTATCTCTGGATCTTTGGCA				2307
Arrestor	847-65-02	ACGATAGAAAATGTAAAGGTGCGC				2308
Arrestor	847-65-03	ACGATAGAAAATGTAAAGGTGCGGT				2309
Secondary Cassette		Set 8				
Probe	936-61-01	AACGAGGCGCACCTTTACATTTTCTATCGTATCCG				2310
Invader	428-81-02	CGTCTTATCTCTGGATCTTTGGCA				2311

Same as 820-35-02 with 3' Amine
Same as 820-35-02 with O-Me U for Blocking
Same as 820-35-02 with O-Me G for Blocking
Same as 820-35-02 with T for Blocking. The T is a mismatch against the RNA sequence.

Same as 428-87-01 without Biotin blocking group

FIGURE 47BI

Arrestor Secondary Cassette	938-61-02	CGGATACGATAGAAAATGTAAAGGTCGC Set 7	Same as 428-87-03 without Biotin blocking group	2312
Monocyte Chemotactic Protein 1 (MCP-1)				
Probe	820-89-01	CCGTACGCGCTCCTCGGAGTTTGGG		2313
Invader	885-76-01	GGGTTGTGGAGTAGTGTTCAAGTA		2314
Arrestor	820-89-02	CCCAAATCGGAAAGGAGGCG Set 9	Same as 720-92-01 without the amine	2315
Secondary Cassette				
MAGE-3				
Probe	1001-01-01	FTTTTCTGGAAGCTTTGCT		2316
Invader	871-18-03	CGATGCGCAAGACGAGCTGCAAGGAAG		2317
Stacker	871-18-01	GAAGATCACAGGAAGAAATAC		2318
Stacker	1138-50-01	GCAGCTCTTGGA		2319
Probe	1138-50-02	AACGAGCGCGACGTTGGTGGA		2320
Stacker	1138-50-03	GCAGCTCTTGGA		2321
Probe	1138-50-04	AACGAGCGCGACGTTGGTGAG		2322
Invader	1138-50-05	CTCCAGGTAGTTTCTCTGCACGAAATC		2323
Arrestor	1138-50-06	CTACCCCAAGGTCGC Set 10		2324
Secondary Cassette				
Stacker	1138-51-01	AGCTCTTGGGATC		2325
Probe	1138-51-02	AACGAGCGCGACITGGGTGAGC		2326
Stacker	1138-51-03	GCCTCTTGGGATCG		2327
Probe	1138-51-04	AACGAGCGCGACITGGGTGAGCA		2328
Invader	1138-51-05	CAGGTAGTTTCTCTGCACGAAATGA		2329
Arrestor	1138-51-06	IGCTCACCCGAAGTGGCG Set 11		2330
Secondary Cassette				
Stacker	1138-67-01	TGCAGGATCACTGCG		2331
Probe	1138-67-02	AACGAGCGCGACCAACATTCATAACA		2332
Invader	1138-67-03	GGCCCTTGGACCCCA		2333
Arrestor	1138-67-04	IGTATGAATTGGTGGTGGCG Set 11		2334
Secondary Cassette				
Stacker	1138-67-05	CAITGAGGATCACTGC		2335
Probe	1138-67-06	AACGAGCGCGACACACCAATTCATAA		2336
Invader	1138-67-07	AGGCCCTTGGACCCA		2337
Arrestor	1138-67-08	ITATGAATTGGTGGTGGCG Set 11		2338
Secondary Cassette				
Human Oncostatin M				
Probe	339-30-02	CTGGCGGTATCTAGGGCTCCA		2339
Invader	264-42-03	GTGTTCAGGTTTGGAGCGGATAA		2340
Arrestor	374-32-01	CTTGGAGCCCTAGATAC-NH2		2341
Arrestor	374-32-02	CTTGGAGCCCTAGATACG-NH2		2342
Arrestor	374-32-03	CTTGGAGCCCTAGATACG-NH2 Set 12		2343
Secondary Cassette				
Probe	524-39-01	CAGTCACGTCTCTCAGGTTTTTG-NH2		2344
Invader	395-05-07	AGGCAGCTCTCAGGTGAGTGTGA		2345
Stacker	435-40-02	GAGCGGATATAGGCTCCA		2346
Arrestor	369-47-07	CAAAACCTGAGAGAGCG-NH2 Set 13	Same as 435-67-04 with 3' Amine	2347
Secondary Cassette				
Probe	1088-74-01	AACGAGCGCGACCCCTCTGTGTG		2348
Arrestor	1088-74-02	CACACAGAGGGTGGCG		2349
Probe	1088-74-03	AACGAGCGCGACCCCTCTGTGTG-NH2		2350
Probe	1088-74-04	AACGAGCGCGACCCCTCTGTGTG-HEX		2351
Invader	603-75-03	GCAAGGACCCAGACTGAGACGGTA	HEX = Hexanediol	2352

FIGURE 47BJ

Slacker	752-01-05	AGCAGTACCCCGCATG	2353
Arrestor	841-52-04	CACACAGAGGAGCG-NH2	2354
Secondary Cassette		Set 10	
Probe	1138-49-02	AACGAGCGCACCTTCTGGAG-NH2	2355
Slacker	1138-49-01	CTGGCCAAGGAG	2356
Invader	1138-49-03	GTCTGCATGAGATCTGTCTGA	2357
Arrestor	1138-49-04	CTCCGAAAGGTGGCG	2358
Secondary Cassette		Set 11	
Probe	1138-49-06	AACGAGCGCACTCTGCTTCT-NH2	2359
Slacker	1138-49-05	GGAGCTGGCCAA	2360
Invader	1138-49-07	TGGTGCTCTCGATGAGATCTGA	2361
Arrestor	1138-49-08	ICCAGAAGCAGAGTGGCG	2362
Secondary Cassette		Set 11	
Probe	1138-49-10	AACGAGCGCACCATGAGATCT-NH2	2363
Slacker	1138-49-09	GTGTGCTCTGGGA	2364
Invader	1138-49-11	GAGTCTGCTGGTGTCCCTGA	2365
Arrestor	1138-49-12	AGATCTCATGTGGCG	2366
Secondary Cassette		Set 11	
Probe	1163-01-01	TGGCCAAGGAGCA	2367
Slacker	1163-01-02	AACGAGCGCACTTCTGGAGC-NH2	2368
Invader	1163-01-03	TCCTGCATGAGATCTGTCTGCA	2369
Arrestor	1163-01-04	GCTCCGAAAGTGGCG	2370
Secondary Cassette		Set 11	
Probe	1163-01-05	GGCCAAGGAGCAC	2371
Slacker	1163-01-06	AACGAGCGCACTCTGGAGCT-NH2	2372
Invader	1163-01-07	CCTGCATGAGATCTGTCTGCTA	2373
Arrestor	1163-01-08	AGCTCCAGAGTGGCG	2374
Secondary Cassette		Set 11	
Probe	1163-01-09	GGCCAAGGAGCACG	2375
Slacker	1163-01-10	AACGAGCGCACTCTGGAGCTC-NH2	2376
Invader	1163-01-11	CCTGCATGAGATCTGTCTGCTTA	2377
Arrestor	1163-01-12	GAGCTCCAGGTGGCG	2378
Secondary Cassette		Set 11	
84H6r			
Probe	688-51-01	CGCGAGATCACGCCAACGACGGTCT	2379
Invader	688-51-02	AGCCTTGAGTTTAATACTTCATAGGCACTA	2380
Arrestor	688-51-03	AGACCGCTGCTTGGCTGATC	2381
Secondary Cassette		Set 14	
Probe	688-51-04	CGCGAGATCACCTCAACACCAATAAAGCCA	2382
Invader	688-51-05	CGGAGACTGAGGAATACGTACCACCA	2383
Arrestor	688-51-06	TGGCTTTTAATGTTGTGAGGTGATC	2384
Secondary Cassette		Set 14	
MSH2			
Probe	690-32-02	CCGTCACGCCCTCCGAACCTGCCCTAG	2385
Invader	690-32-04	GTATAATAGTCCCGACGATCAAAAGGC	2386
Slacker	709-52-01	GGTCTTGGGYAGGG	2387
Arrestor	690-32-05	GGGAGGGCTTGACGGGATC	2388
Secondary Cassette		Set 1	

FIGURE 47BK

bold indicates 2' O methyl base

ELISA Format Kits

Leukocyte-associated molecule-1 alpha subunit, human (h-LFA1)

G4731 Probe Set

p
l
c

5'-CTCTCTCTCTCCAGGGCGTCGTCGG-PO4-3'
5'-CTGTACACACACGTCGGTCTGA-3'
5'-AAAAAGGAGACGAGAGAGTG-3'

2389
2390
2391

SEQ ID NO

for the remainder of the oligo sets on this list, the fret/target secondary sets are one of the following 11:

FRET/TARGET SETS

	FRET	TARGET
set 1	307-70-03	502-93-01
set 2	307-70-03	502-93-02
set 3	187-46-01	641-60-02
set 4	187-46-01	277-68-05
set 5	187-46-01	685-56-01
set 6	187-46-01	641-60-03
set 7	187-46-01	649-10-01
set 8	680-17-02	782-70-02
set 9	187-46-01	277-68-06
set 10	187-46-01	491-02-02
set 11	307-70-03	761-40-02

FRETS

307-70-03
187-46-01
680-17-02

5'-Fam-ATTC(CY3)TCTCAGACT-NH2-3'
5'-Fam-CAAC (CY3)GCTTCCTCCG-3'
5'-Fam-CGCT (CY3)TCTCGCTCGC-3'

2392
2393
2394

TARGETS

502-93-01
502-93-02
641-60-02
277-68-05
685-56-01
641-60-03
649-10-01
782-70-02
277-68-06
491-02-02

5'-CAGTCTGAGATGAATGATACGAGAGAGT-NH2-3'
5'-CAGTCTGAGATGAATGAGACGAGAGAGT-NH2-3'
5'-CGGAGGAAGCAGTTGGAGGCGTGACGGT-NH2-3'
5'-CGGAGGAAGCAGTTGGTGCCTCGTTAA-PO4-3'
5'-GCGGAAGAAGCGTTGGTATCTCGGCGG-NH2-3'
5'-CGGAAGAAGCAGTTGGAGGCGTGACGGT-NH2-3'
5'-CGGAAGAAGCAGTTGGTGCCTCGTTAA-NH2-3'
5'-GCGAGAGAGACAGCGCAACCTGCCGTTG-3'
5'-CGGAGGAAGCAGTTGTCGCGAAGATG-3'
5'-CGGAAGAAGCAGTTGGAGACGTGACTGTGG-NH2-3'

2395
2396
2397
2398
2399
2400
2401
2402
2403
2404

FIGURE 47BL

761-40-02		5'-GGAGTGAGACAGCGAAAGACTGCCGTTCT-3'	2405
Cell Lysate Kits			
adipocyte lipid binding protein, mouse (m-aP2)			
C289 Probe Set			
I	FRET/TARGET SET 1		2406
p	5'-CCGCCATCTAGGGTTATGATGCTA-3'		2407
a	5'-CTCTCTCGTCTCCTTCACCTTCCTGTCG-NH2-3'		2408
a	3'-PO4-AGCAGAGGAAGTGGAAAGGACAGC-5'		2409
a	3'-NH2-AGCAGAGGAAGTGGAAAGGACAGC-5'		2410
p	3'-PO4-AGAGCAGAGGAAGTGGAAAGGACAGC-5'		2411
p	5'-AACGAGGGCGACCTTCACCTTCCTGTCG-NH2-3'		2412
a	5'-AACGAGGGCGACCTTCACCTTCCTGTCG-Biotin-3'		2413
a	3'-PO4-CCGCGTGGAAAGTGGAAAGGACAGC-5'		2414
p	3'-PO4-CTCCGCGTGGAAAGTGGAAAGGACAGC-5'		2415
a	5'-CATCTTCGCGGACTTCACCTTCCTGTCG-NH2		2416
a	3'-PO4-GCCTGAAGTGGAAAGGACAGC-5'		2417
a	3'-PO4-GCGCCTGAAGTGGAAAGGACAGC-5'		2418
p	5'CTTGCTCCCGTGCTTCACCTTCCTGTCG-NH2		2419
p	5'CTTGCTCCCGTGCTTCACCTTCCTGTCG-Biotin		2420
a	3'-PO4-GGGCACGGAAGTGGAAAGGACAGC-5'		2421
a	3'-PO4-AGGGGCACGGAAGTGGAAAGGACAGC-5'		
G392 Probe Set	FRET/TARGET SET 1		
p	5'-CTCTCTCGTCTCCACATTCCACCACCAG-NH2-3'		2422
I	5'-TTGTGTAAGTCACGCCCTTTCATAAT-3'		2423
rev-ErbA, mouse (m-revErbA			
C155 Probe Set			
p	FRET/TARGET SET 4		2424
I	5'-AACGAGGCGCACGAAGCAGGGTAATGAATCT-NH2-3'		2425
	5'-CCACTCCTGAAGGCTCCGCAGTC-3'		
Carnitine palmitoyltransferase, mouse (m-CPT-1)			
T352 Probe Set			
p	FRET/TARGET SET 2		2426
I	5'-CTCTCTCGTCTCAATGCCTGTCGCC-NH2-3'		2427
	5'-GCTTCAGGGTTTGTCCGGAAGAAGAAC-3'		
C851 Probe Set			
p	FRET/TARGET SET 2		2428
I	5'-CTCTCTCGTCTCGTTTTCGGCGGATACAT-NH2-3'		2429
	5'-CGGCTTGATCTCTTTCACGGTCCAC-3'		
Carnitine palmitoyltransferase, human (h-CPT-1)			

FIGURE 47BM

U744 Probe set	FRET/TARGET SET 2		
	p	5'-CTCTCTCGTCTCAACTTCAAATACCACTGTAATCT-NH2-3'	2430
	i	5'-CTCACGTAATTGTAGCCCAAGGATTTTC-3'	2431
	a	3'-NH2-GCAGAGTTGAAATTTATGGTGACATTAGA-5'	2432
	s	5'-TGGTCCAAAGACCGACAGCAAAATCTTGAG-3'	2433
A456 Probe Set	FRET/TARGET SET 10		
	p	5'-CAGTCACGTCTCTTCAGGGAGTAGCGCA-NH2-3'	2434
	i	5'-CCCCGTGGTAGGAGAGCAGCACTA-3'	2435
	a	3'-NH2-GCAGAGAAAGTCCCTCATCGCGT-5'	2436
C759 Probe Set	FRET/TARGET SET 2		
	p	5'-CTCTCTCGTCTCGCCCAAGGATT-NH2	2437
	i	5'-CTCCCAAGTCGCTCACGTAATTTGTAA-3'	2438
	a	5'-AATCCTGTGGCGGAGACG-B-3'	2439
	s	5'-TTAACTTCAAATACCACTGTAATCTTGGTCCAAGACCG-3'	2440
G329 Probe Set	FRET/TARGET SET 4		
	p	5'-ACCGAGGCGCACCAATTATTCCTAACG-b-3'	2441
	i	5'-GCCCGTTTCAGAGTCCGATTGATTTTGA-3'	2442
	a	3'-(biotin)-GCGGTGGTTAATAAGGATTGC-5'	2443
C1763 Probe Set	FRET/TARGET SET 9		
	p	5'-CATCTTCGGGAGACATTTCTTGATGATTCCTT-3'	2444
	i	5'-AAAGGTGTCTGGGCTCGTGCT-3'	2445
	a	3'-(biotin)-GCCTCTGTAAAGAACTACTAAGGAA-5'	2446
Phosphatidylinositol-3-phosphate p110 __, human (h-PI3Kp110_)			
G1045 Probe Set (FV Arm)	FRET/TARGET SET 4		
	p	5'-AACGAGGCGCACCAAGTTTCTCTGTG-NH2-3'	2447
	i	5'-GACCAGCCCTGACATGAACCTTTTAC-3'	2448
	a	3'-NH2-CGCGTGGTCAAAGGAGACAC-5'	2449
C1521 Probe Set	FRET/TARGET SET 2		
	p	5'-CTCTCTCGTCTCGGGAGGTAATAAAGG-NH2-3'	2450
	i	5'-GCTGCCCTTTCAATAATCTTATCGAAC-3'	2451
	a	3'-NH2-AGCAGAGCCCTCCCATTTATTCC-5'	2452
C2667 Probe Set	FRET/TARGET SET 2		
	p	5'-CTCTCTCGTCTCGTTGTTATCTTTAAGCCAG-NH2-3'	2453
	i	5'-CGGTCCAGGTCATCCCCAGAC-3'	2454

FIGURE 47BN

a	3'NH2-AGCAGAGCAACATAAGAAATTCGGTC-5'	2455
G537 Probe Set		
p	FRET/TARGET SET 2	
i	5'-CTCTCTCGTCTCTCTCTGGTGGATATGTTTG-NH2-3'	2456
a	5'-CTAAGTTTTCAGGGATGGATGGTTCATGC-3'	2457
	3'NH2-AGCAGAGGAGACCACTATACAAAC-5'	2458
T3192 Probe Set		
p	FRET/TARGET SET 2	
i	5'-CTCTCTCGTCTCAACTGTGTGGC-NH2-3'	2459
a	5'-TTAAGATCTGTAGTCTTCCGAAC-3'	2460
	3'NH2-AGCAGAGTTCACACACCCG-5'	2461
Cartilage-derived morphogenic protein 1, human (h-CDMP1)		
A831 Probe Set		
p	FRET/TARGET SET 6	
i	5'-CCGTCACGCTCTCTGTTGCCTCCC-(biotin)-3'	2462
a	5'-AGCCTCCAACTTCACGCTGT-3'	2463
	5'-GGGAGGCAACAGGAGGCG-(biotin)-3'	2464
A1691 Probe Set		
p	FRET/TARGET SET 5	
i	5'-CCGCCGAGATCACTGAAGAGGATGCTGATGG-(biotin)-3'	2465
a	5'-ACACCACGTTGTTGGCAGAGTCAAG-3'	2466
	5'-CCATCAGCATCCTCTTCAGTGATCTCGG-(biotin)-3'	2467
b-actin, rat (r-bACT)		
C1671 Probe Set (longer)		
p	FRET/TARGET SET 6	
i	5'-CCGTCACGCTCGCCTTAGGGTTCA-NH2-3'	2468
a	5'-TCTGGGTCATCTTTTCACGGTTGA-3'	2469
s	3'-GCGGAGCGGAATCCCAAGT-5'	2470
	5'-GAGGGGCCTCGGTGAGC-3'	2471
Bile Salt port Pump, rat (r-BSEP)		
p	FRET/TARGET SET 5	
p	5'-CCGCCGAGATCACGAGTCTTGCCCTTTC-(biotin)-3'	2472
i	5'-CCGCCGAGATCACGAGTCTTGCCCTTTC-NH3-3'	2473
a	5'-TTCACACACGCTTTTCCCTGGTATCTCC-3'	2474
	3'-(biotin)-CTAGTGCTCAAGAACGGAAAG-5'	2475
G1288 Probe Set		
p	FRET/TARGET SET 2	
i	5'-CTCTCTCGTCTCCCAGAAAGGCCAGT-(biotin)-3'	2476
a	5'-TTCCTTCATCTAGGACAAAGTGTGGAACCATAA-3'	2477
	5'-ACTGGCCTTCTGGGAGACG-(biotin)-3'	2478

FIGURE 47BO

A790 Probe Set	p	FRET/TARGET SET 6	2479
	i	5'-CCGTCACGCCTCTTTCCTCATTCTCCT-(biotin)-3'	2480
	a	5'-CCCAATTTCGATTCTCATTTATTCTCCGGAAGTAAATC-3'	2481
	a	5'-AGGAGAAATGAGGAAAGAGGGCG-(biotin)-3'	
Nitric Oxide Synthase 2A, human (h-iNOS2) A3418 Probe Set	p	FRET/TARGET SET 6	2482
	i	5'-CCGTCACGCCTCTGTCTTTCTTCTTCGC-(biotin)-3'	2483
	a	5'-GCTGCACCGCCACCCG-3'	2484
	a	5'-GCGAAGAAAGACAGAGGGCG-(biotin)-3'	
Neutral Carboxy Ester Hydrolase, human (h-NCEH) A1221 Probe Set	p	FRET/TARGET SET 7	2485
	p	5'-AACGAGGGCGCACTCTTCTTATTCTCCTG-B-3'	2486
	i	5'-AACGAGGGCGCACTCTTCTTATTCTCCTG-NH2-3'	2487
	s	5'-GTCTCAAAGTCCACCACAGTCTC-3'	2488
	s	5'-CAGGAGAAAGAGAGTGCGC-(biotin)-3'	
A1221 Probe Set	p	FRET/TARGET SET 6	2489
	p	5'-CCGTCACGCCTCTCTTCTTATTCTCC-3'	2490
	i	5'-CCGTCACGCCTCTCTTCTTATTCTCC-NH2-3'	2491
	a	5'-GTCTCAAAGTCCACCACAGTCTC-3'	2492
	s	3'-GCGGAGAGAGAATAAGAGG-5'	2493
C1309. Probe Set	p	FRET/TARGET SET 8	2494
	i	5'-GAACGGCAGGTTTGGCACTCTTGGCATT-NH2-3'	2495
	a	5'-CAGGTAGGCGTAGGCTTGA-3'	2496
	a	3'-NH2-CGTCCAAACCGTGAGAACCGGTAA-5'	2497
	s	5'-GGCTCTGTGCTGGGCTA-NH2-3'	
Peroxisomal Proliferation Activator Protein Receptor alpha, human (h-PPAR_) G1480 Probe Set	p	FRET/TARGET SET 6	2498
	i	5'-CCGTCACGCCTCCGACTCCGCT-(biotin)-3'	2499
	a	5'-CGGTGCAGCGCAGCATT-3'	2500
	a	5'-AGACGGAGTCGGGAGGGCG-(biotin)-3'	
A1044 Probe Set	p	FRET/TARGET SET 6	2501
	i	5'-CCGTCACGCCTCTGTCACTTGATCGTTCT-(biotin)-3'	2502
	i	5'-TGGCCTCATAAACTCCGTATTTAGCAAG-3'	2503
	a	5'-AGAACGATCAAGTGACAGAGGGCG-(biotin)-3'	

FIGURE 47BP

C 1311 Probe Set		
p	FRET/TARGET SET 6	2504
i	5'-CCGCCGAGATCACGTGTCCTACGTTTAGAAG-(biotin)-3'	2505
a	5'-CACATGTACAATACCCCTCCTGCAATTTTTC AATC-3'	2506
	5'-CTTCTAAACGTTAGGACACGTTGATCTCGG-(biotin)-3'	
Peroxisomal Proliferation Activator Protein Receptor beta, human (h-PPAR_)		
A595 Probe set	FRET/TARGET SET 6	
6B. Designed truncated probe and stackers to reduce temperature		
p	5'-CCGTCACGCCCTCTCTTCTGAATCCTTGC-3'	2507
i	5'-CTGGCACCTTGTTGCGGTTCTA-3'	2508
a	3'-NH2-GCGGAGAGAAGACTTAGAACG-5'	2509
s	5'-AGCTGCGCTCACACTTCTCGT-3'	2510
6C. Design for new INVADER assay with 50% 2'-Me.	FRET/TARGET SET 6	
p	5'-CCGTCACGCCCTCTCTTCTGAATCCTT-NH2-3'	2511
i	5'-CTGGCACCTTGTTGCGGTTCTA-3'	2512
a	3'-NH2-GCGGAGAGAAGACTTAGAAC-5'	2513
s	5'-CAGCTGCGCTCACACTTCTCGT-NH2-3'	2514
6D. Truncate probe.	FRET/TARGET SET 6	
p	5'-CCGTCACGCCCTCTCTTCTGAATCCTT-NH2-3'	2515
i	5'-CCTGGCACCTTGTTGCGGTTCTA-3'	2516
s	5'-GCAGCTGCGCTCACACTTCTCGT-NH2-3'	2517
C891 Probe Set	FRET/TARGET SET 7	
p	5'-AACGAGGCGCACGGTAGGCATTGTAGA-3'	2518
i	5'-CCTTCTTTTGGTCATGTTGAAGTTTTTCAC-3'	2519
a	3'-CGCGTGCCATCCGTAACATCT-5'	2520
s	5'-TGTGCTTGGAGAAGGCCCTTCA-3'	2521
Substance P, rat (r-SubP)		
C344 Probe Set	FRET/TARGET SET 6	
p	5'-CCGTCACGCCCTCGCCACTTGTTTTTCA-NH2-3'	2522
i	5'-CCATGCCCATAAAGAGCCCTTTAACAGGA-3'	2523
a	3'-NH2-GCGGAGCGGTGAACAAAAAGT-5'	2524
s	NO STACKER	
A396 Probe Set	FRET/TARGET SET 6	
p	5'-CCGTCACGCCCTCTTTATGCCCTTTTGTGA-NH2-3'	2525

FIGURE 47BQ

i	5'-TGCCCATTAGTCCAACAAGGAATCTGTA-3'	2526
a	3'-GCGGAGAAATACGGAAAACACT-5'	2527
s	5'-GAGATCTGACCATGCCCATAAAGAGCC-NH2-3'	2528
C752 Probe Set		
p	FRET/TARGET SET 7	
i	5'-AACGAGGCGCACGCTGGCAAACTTGT-NH2-3'	2529
a	5'-CCTTTCTGTCTTTGGAGACTTGCATCA-3'	2530
s	3'-NH2-CGCGTGCAGACCGTTTGAACA-5'	2531
	5'-ACAACTCCATCAACACTGTGCTTTGCTG-NH2-3'	2532
Hepatic Lipase, human (h-LIPC)		
A830 Probe Set		
p	FRET/TARGET SET 7	
i	5'-AACGAGGCGCACTCTAGGAAGTGGCA-NH2-3'	2533
a	5'-GTGCTGGGCAATATGTCTGTAGAGCG-3'	2534
s	3'-NH2-CGCGTGAGATCCTTCACCGT-5'	2535
	5'-GCCAGGCTGGAAGGAGC-NH2-3'	2536
C1154 Probe Set		
p	FRET/TARGET SET 5	
i	5'-CCGCCGAGATCACCGTCTCAGTTTGGT-NH2-3'	2537
a	5'-CGAGTAGTGACATGGTAAAGTTGTTGTATTGGCT-3'	2538
	3'-NH2-CTCTAGTGGCAGAGTCAAAACCA-5'	2539
Hepatic Lipase, rat (r-LIPC)		
G357 Probe Set		
p	FRET/TARGET SET 5	
i	5'-CCGCCGAGATCACCGTTCACGGGT-NH2-3'	2540
a	5'-GGGAGATCCAGTCCACTCAATCCA-3'	2541
s	3'-NH2-TCTAGTGGTGCAAGTGCCCCAA-5'	2542
	5'-GGGACTGTCGGGACTTCAGG-NH2-3'	2543
C1167 Probe Set		
p	FRET/TARGET SET 8	
i	5'-GAACGGCAGGTTTGGGAAATTTCTTTATTCTT-NH2-3'	2544
a	5'-ATTCTTCCGCCCAGGGTGATG-3'	2545
s	3'-NH2-GTCCAAACCCCTTAAAGAAATAAGAA-5'	2546
	5'-CTTTTGTCCCCAGCAGTGT-NH2-3'	2547
Metabotropic Glutamate Receptor 2, rat (r-mGluR2)		
C1403 Probe Set		
p	FRET/TARGET SET 7	
i	5'-AACGAGGCGCACGCGTGGTGGGA-NH2-3'	2548
a	5'-GCCTCATAGCATCGCAGAGGTGT-3'	2549
s	3'-NH2-CGCGTGCCACCACCAACCCCT-5'	2550
	5'-CAGAGGGCACGGTGCATGTTGT-NH2-3'	2551

FIGURE 47BR

G-protein coupled receptor 2, rat (r-ETBR-LP2)
A1629 Probe set
p
i
a
s
FRET/TARGET SET 8
5'-GAACGGCAGGTTTGTGCAGCACGCCGC-NH2-3'
5'-GAGAGGCCAAAGTGAGACCATGTGAAAAGAAA-3'
3'-NH2-CGTCCAAACAGTCGTCTGGCG-5'
5'-CATGGATCGGCATGGCCCC-NH2-3'
2552
2553
2554
2555
i kappa b alpha, human (h-MAD3)
C542 Probe Set
p
i
a
FRET/TARGET SET 7
5'-AACGAGGCGCACCGGTGTAGGGGGG-(biotin)-3'
5'-GCCCTGCTCACAGGCAAT-3'
5'-CCCCCTACACCGTGCGC-(biotin)-3'
2556
2557
2558
C363 Probe Set
P
I
A
FRET/TARGET SET 6
5'-CCGTACACGCCTCGTCAGTGCCTTTTC-(biotin)-3'
5'-CACCTGGCGGATCACTTCCATGT
5'-GAAAAAGGCACTGACGAGGCG-(biotin)-3'
2559
2560
2561
G953 Probe Set
P
I
A
FRET/TARGET SET 6
5'-CCGTACACGCCTCCCCTCATCCTCACT-(biotin)-3'
5'-ACTCTGACTCTGTGTCA TAGCTCTT
5'-AGTGAGGATGAGGGAGGCG-(biotin)-3'
2562
2563
2564
C923 Probe Set
P
I
A
S
FRET/TARGET SET 7
5'-AAGAGGCGCACCGTTTTCTAGTGTC A-NH2-3'
5'-CTCACTCTCTGGCAGCATCTGAAT-3'
3'-NH2-CGCGTGCCCAAAGATCACAGT-5'
5'-GCTGGCCCCAGCTGC-NH2-3'
2565
2566
2567
2568
Lecithin cholesterol acyltransferase, human (h-LCAT)
C821 Probe Set (truncated Probe Design)
p
i
a
s
FRET/TARGET SET 5
5'-CCGCGCAGATCACGGTTATGCGCTG-NH2-3'
5'-CCAGGGGGAGGTGGTC-3'
3'-NH2-TCTAGTGCCAATACCGGACG-5'
5'-CTCCTCTTTCAGCTTGATGCTGG-NH2-3'
2569
2570
2571
2572
C827 Probe Design
p
i
a
FRET/TARGET SET 8
5'-GAACGGCAGGTTTGGTGGTGTATGCG-NH2-3'
5'-AGAGGGGAAAACATCCAGGGGGAG-3'
3'-NH2-CGTCCAAACCCACCACCAATACGCG-5'
2573
2574
2575

FIGURE 47BS

C1217 Probe Design		
p	FRET/TARGET SET 5	2576
l	5'-CCGCCGAGATCACGAGATGCTGTATCCC-NH2-3'	2577
a	5'-GGTCAGGTTGCTGAAGACCATGTTG-3'	2578
	3'-NH2-TCTAGTGCTCTACGACATAGGG-5'	
Apolipoprotein A-1, human (h-ApoA1)		
A177 Probe Set		
p	FRET/TARGET SET 6	2579
l	5'-CCGTCACGCCTCTGAGCACATCCACG-NH2-3'	2580
a	5'-ACATAGTCTCTGCCGCTGTCTTA-3'	2581
s	3'-NH2-GCGGAGACTCGTGTAGGTGC-5'	2582
	5'-TACACAGTGGCCAGGTCCTT-NH2-3'	
A227 Probe Set (titrate length of 2'-O-Me in Invader)		
p	FRET/TARGET SET 8	2583
l	5'-GAACGGCAGGTTTGTCCTCCAAAGCGG-NH2-3'	2584
i	5'-GTCAAGGAGCTTTAGGTTTAGCTGTTTA-3'	2585
i	5'-GTCAAGGATCTTTAGGTTTAGCTGTTTA-3'	2586
A	5'-GTCCCAGTTGTCAAGGATCTTAGGTTTAGCTGTTTA-3'	2587
s	3'-NH2-GTCCAAACAGGGTTCGCC-5'	2588
	5'-AGCCTTCAAACTGGGACACATAGTCTC-NH2-3'	
G350 Probe Set		
p	FRET/TARGET SET 5	2589
l	5'-CCGCCGAGATCACTTCTGTCTCCTT-NH2-3'	2590
a	5'-CTCCTGCCTCAGGCCG-3'	2591
s	3'-NH2-TCTAGTGGAGACAGAGGAA-5'	2592
	5'-TTCCAGGTTATCCAGAACTCC-NH2-3'	
G233 Probe Set		
p	FRET/TARGET SET 11	2593
l	5'-AGAACGGCAGTCTTCTGTTTCCCAAG-NH2-3'	2594
a	5'-CCAGTTGTCAAGGAGCTTTAGGTTTAGT-3'	2595
s	3'-NH2-CGTCAGAAAGACAAAAGGGTTCC-5'	2596
	5'-CGGAGCCTTCAAACCTGGGACACATAGT-NH2-3'	
Metabotropic Glutamate Receptor 1, rat (r-mGluR1)		
T934 Probe Set		
p	FRET/TARGET SET 11	2597
l	5'-AGAACGGCAGTCTTTAGAATAGGCGATCTGT-NH2-3'	2598
a	5'-CACTCAGGCTATGCTTGTGGCT-3'	2599
s	3'-NH2-GTCAGAACTTTATCCGCTAGACA-5'	2600
	5'-GGGATGTCGAACAGCTGGAGAAGATTCT-NH2-3'	
Ubiquitin, human (h-UBIq)		

FIGURE 47BT

G119 Probe Set (MO4 Arm)	p	FRET/TARGET SET 6	2601
	l	5'-CCGTACAGCCTCCTTTACATTTTCTATCGTATCCG-(biotin)-3'	2602
	a	3'-(biotin)-GCGGAGGAAATGTAAAAAGATAGCATAGGC-5'	2603
G119 Probe Set	p	FRET/TARGET SET 5	2604
	l	5'-CGCCGAGATCACCTTTACATTTTCTATCGTATCCG-(biotin)-3'	2605
	a	3'-(biotin)-CTAGTGGAATGTAAAAAGATAGCATAGGC-5'	2606
G131 Probe Set	p	FRET/TARGET SET 9	2607
	l	5'-CATCTTCGCGGACTGGATCTTGGCC-(biotin)-3'	2608
	a	3'-(biotin)-GCCTGACCTAGAACCCGG-5'	2609
Scanned G119 region (ELISA format (No Arrestors)	p	5'-CTCTCTCGTCTTACATTTTCTATCGTATCCG-NH2-3'	2610
	p	5'-CTCTCTCGTCTTACATTTTCTATCGTATCCG-NH2-3'	2611
	p	5'-CTCTCTCGTCTCCTTTACATTTTCTATCGTATCCG-NH2-3'	2612
	p	5'-CTCTCTCGTCTCCCTTTACATTTTCTATCGTATC-NH2-3'	2613
	l	5'-CTCTCTCGTCTCGCTTACATTTTCTATCG-NH2-3'	2614
	l	5'-GGAATTCCTTCCCTATCCTGGATCTTGA-3'	2615
	l	5'-GGAATTCCTTCCCTATCCTGGATCTTGGC-3'	2616
	l	5'-CCTTCCTTATCCTGGATCTTGGCA-3'	2617
	l	5'-TTCCCTTATCCTGGATCTTGGCCA-3'	2618
	l	5'-TCCTTATCCTGGATCTTGGCCTA-3'	2619
Ubiquitin, mouse (m-UBIq) G294 Probe Set	p	FRET/TARGET SET 7	2620
	l	5'-CCGTACAGCCTCCCTCTGGATGTTGTA-(biotin)-3'	2621
	a	3'-(biotin)-GCGGAGGGAAGACCTACAACAT-5'	2622
G294 Probe Set	p	FRET/TARGET SET 5	2623
	l	5'-CGCCGAGATCACCCCTTCTGGATGTTGTA-(biotin)-3'	2624
	a	3'-(biotin)-CTAGTGGGAAGACCTACAACAT-5'	2625
G294 Probe Set	p	FRET/TARGET SET 6	2626
	l	5'-CCGTACAGCCTCCCTTCTGGATGTTGTAAT-NH2-3'	2627

FIGURE 47BU

a	3'-NH2-GCGGAGGGAAGACCTACAACATTA-5'	2628
G294 Probe Set		
p	FRET/TARGET SET 6	
i	5'-CCGTCACGCCCTCCCTTCTGGATGTTGTAATC-NH2-3'	2629
a	5'-CCAGGTGCAGGGTTGACTA-3'	2630
	3'-NH2-GCGGAGGGAAGACCTACAACATTAG-3'	2631
T514 Probe Set		
p	FRET/TARGET SET 7	
i	5'-AACGAGCGGCACATGTTGTAATCAGAGGG-NH2-3'	2632
a	5'-TGCAGGGTTGACTCTTTCTGGA-3'	2633
	3'-NH2-CGCGTGTACAACATTAGTCTCTCCCC-5'	2634
G750 Probe Set		
p	FRET/TARGET SET 9	
i	5'-CATCTTCGCGGACCTTCTGGATGTTGTA-NH2-3'	2635
a	5'-GGACCAGGTGCAGGGTTGACTT-3'	2636
	3'-NH2-GCCTGGAAGACCTACAACAT-5'	2637
G185 Probe Set		
p	FRET/TARGET SET 9	
i	5'-CATCTTCGCGGACCTTCACGTTCTCGATGG-NH2-3'	2638
a	5'-CCCTCTTTATCCTGGATCTTGGCA-3'	2639
	3'-NH2-GCGCCTGAAGTGCAAGAGAGCTACC-5'	2640